Horse People

THOROUGHBRED CULTURE IN LEXINGTON & NEWMARKET

REBECCA CASSIDY

VISIT…

Horse People

ANIMALS, HISTORY, CULTURE

Harriet Ritvo, Series Editor

Horse People

Thoroughbred Culture in Lexington and Newmarket

REBECCA CASSIDY

The Johns Hopkins University Press
Baltimore

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Printed in the United States of America on acid-free paper
2 4 6 8 9 7 5 3 1

The Johns Hopkins University Press
2715 North Charles Street
Baltimore, Maryland 21218-4363
www.press.jhu.edu

Library of Congress Cataloging-in-Publication Data

Cassidy, Rebecca.
Horse people : thoroughbred culture in Lexington and Newmarket /
Rebecca Cassidy.
p. cm. — (Animals, history, culture)
Includes bibliographical references.
ISBN-13: 978-0-8018-8703-1 (hardcover : alk. paper)
ISBN-10: 0-8018-8703-8 (hardcover : alk. paper)
1. Horsemen and horsewomen—Kentucky—Lexington. 2. Thoroughbred horse—
Breeding—Kentucky—Lexington. 3. Horse racing—Kentucky—Lexington.
4. Horsemen and horsewomen—England—Newmarket. 5. Thoroughbred horse—
Breeding—England—Newmarket. 6. Horse racing—England—Newmarket. I. Title.
SF284.42.U6C37 2007
798.40092′2—dc22 2007020674

A catalog record for this book is available from the British Library.

Special discounts are available for bulk purchases of this book. For more information, please contact Special Sales at 410-516-6936 or specialsales@press.jhu.edu.

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Preface

When William Faulkner attended the 1955 Kentucky Derby, he was struck by the bond between the racehorses and his fellow spectators, observing that "what the horse supplies to a man is something deep and profound in his emotional nature and need." For Faulkner, this connection dwarfed the momentary pleasures of betting: "It is much deeper than that. It is a sublimation, a transference: man, with his admiration for speed and strength, physical power far beyond what he himself is capable of, projects his own desire for physical supremacy, victory, onto the agent." This book explores the nature of this transference and the industry that has built up around it by traveling to two of the most important racing sites in the world, Newmarket in England and Lexington in Kentucky.[1]

Horse racing is ancient and modern in outlook, global and local in scope. Something of the drama of human experience is inscribed in every horse race. It is dangerous and to most people visually arresting. Every race contains the potential to evoke elemental emotions and events: triumph, disappointment, disaster, tragedy, death. The weighting of that sentence is deliberate: there is usually only one winner. Racing has always attracted people of high status as well as those who wish to "try their luck," often the least powerful members of society: gamblers, crooks, and the poor. Racing is therefore both conservative and anarchic; the balance between these two elements is inherently unstable, in constant negotiation. It is the sport of kings, as well as the working man's obsession. Participation can confer high status. At the same time it has a seedy, degenerate side. Racing is corrupt, bent, bought, potentially ruinous, and enormously seductive. At the center of the activities that produce this spectacle is a unique human-animal relationship, between the racehorse and its keepers.

Horses have been objects of human desire since they consented to carry us upon their backs and pull our chariots. Domesticated horses eased human burdens and took over much of the drudgery involved in pastoral life. Draft and carriage horses retained a sensitivity to human requirements that lifted them above cattle or oxen. As

a result of thousands of years of domestication and training, horses are pliant yet responsive. Partly due to this quality and also due to their physiology—not too big, not too small, sure-footed and nimble—the horse offered us mobility, perhaps the greatest gift of any animal. A select group of horses, chosen not for their strong backs and willing dispositions, supplied something else—speed. Fast, powerful horses were once the basis of military might; their distribution determined the fortunes of empires. Their military importance and perhaps also their intrinsic qualities have made great horses into cultural icons, the gift most fitting for a prince. While working horses have retreated from daily life in Britain and the United States, becoming marginalized museum pieces on farms run for tourists, racehorses have retained their place in the center, their prestigious associations intact.

This book makes a contribution to the recent scholarship that explores human-animal relationships in specific historical contexts. It does not make any general pronouncements about our relationships with animals, our treatment of them, or our responsibilities to them, but rather begins from the premise that the things we choose to do with animals reveal something of ourselves and our societies. Understandings of animals, the meanings people choose to give them, are not determined by any objective set of properties. To the average American, for example, the dog is a loyal and versatile servant, a herder and guard; to many Muslims he is a genital-licking polluter. A dog is a dog is a dog, but the symbolic, historical, material capital he mobilizes is indeterminate.[2]

In the West, animals have historically served as counterpoints to humans, as one-half of a set of weighted binary opposites. In various ways, from Aristotle to Descartes, animals have been other than, and inferior to, humans. This conceptual arrangement is not organic, however, and anthropologists working with hunting and gathering societies all over the world have discovered a far more egalitarian perspective: that humans are to animals as animals are to humans, that is, embodied souls. In the West, to be human has traditionally meant precisely to be not animal. In the Amazon or the Arctic, to be animate is to possess a soul, and the important distinctions lie not between animals and humans but between soul-containing vessels (humans and animals and some plants), spirits, and objects. Human-animal relationships are therefore a privileged realm in which it is possible to understand not only particular ways of life but also particular ideas of what it means to be human.[3]

To many people the spectacle of racing takes place between animals naturally inclined to compete. The sight of two horses "battling it out" down the stretch to the finish line is, for them, an expression of the horses' desires, independent of human involvement. In another sense, racing is a competition between people, and it is this "unnatural history" of racehorses that demands my attention. The human-Thorough-

bred relationship involves far more than the public spectacle that takes place on the track. Anyone with enough money can buy a horse and win a race. However, this is the antithesis of the aims of the men and women who breed racehorses. Breeders want to produce long lines of champions, they want to leave their mark on the breed, and they want their breeding theories to be vindicated by their dominance of the racing scene. They want to be remembered as having had a gift for horses. These are achievements that money can't buy (although it certainly helps), and they invite exploration. How is it possible to win races without winning? Why breed racehorses? What economic, cultural, and political capital is at stake in this endeavor?[4]

How might one begin to answer these questions? I chose to spend long periods with the people who make their livings from racehorses. Through working alongside racing professionals I have gained some insight into their motivations, their priorities, their way of seeing the world. There are no two better places to encounter racehorses and racing people than Newmarket in England and Kentucky in the United States, the two most important centers of breeding and racing in the world. Both are completely overrun with racehorses and racing people, and crammed with specialized services and facilities that define each of them as a center of excellence. Both have a particular atmosphere that sustains this specialization, making a life with racehorses seem the only life worth living. I focused on flat racing (excluding jump racing, which uses the same breed of horse, and trotting and pacing, which use different breeds) because of the international scope this offered. Jump racing is popular in Europe but of marginal importance in the States. Conversely, trotting and pacing are rarely seen in the United Kingdom, despite their popularity in the United States.

Newmarket is a small market town just outside Cambridge in the east of England. History has it that James I visited in 1605, founding the association between British royalty and the town. This association was strongest during the reign of Charles II, when the expression "Royal Newmarket" was coined. Newmarket's greatest attractions lay in its vast Heath and in its proximity to London, the seat of power. The Heath offered flat spaces on which to stage races and to hunt, with the city only a day's ride away. Today, there are two racecourses, seventy training stables, a huge network of gallops, and sixty stud farms in the area. The town itself hosts Tattersalls (a Thoroughbred sales complex), the Jockey Club Rooms, the National Horseracing Museum, and a large number of associated trades and services. More than a third of the adult population is involved directly in the racing industry. The town is surrounded by studland that is protected by the local authority, and this distinctive landscape is a constant reminder of the business that takes place there. Newmarket is the traditional home of flat racing, and anyone hoping to understand even a little about the Thoroughbred is obliged to spend as much time there as possible.[5]

If the antiquity of Newmarket's links with Thoroughbred racing is beyond reproach, Lexington, at the heart of the Blue Grass in Kentucky, eclipses it in beauty and scale. The Blue Grass was noted for its natural beauty and fertility by many early explorers, including Daniel Boone, who contributed the first bill concerning the breeding of horses to the area in 1775.[6] Horses flourished in Kentucky, nourished by great pasture and mineral-rich water and cared for by immigrants from Virginia who came to Kentucky to seek their fortunes in horseflesh. The natural advantages of the area have been carefully managed by successive generations of Kentucky horse farmers. Today it is visually stunning: perfect pastures are edged by white post-and-rail fences, immaculately maintained stud buildings dot the landscape, cherry trees line sweeping drives that lead to splendid houses. The gentle undulations of the countryside cry out for horses and look eerily empty without them. Cows are simply incongruous in the Lexington landscape.

The initial success of both Newmarket and Lexington grew out of the natural advantages offered by the Heath and the rolling limestone hills, but their continued dominance of the industry has been maintained by human interventions. Horsemen and horsewomen have worked hard to preserve the association of their towns with the Thoroughbred and with racing, on which their livelihoods depend. Today, this association is assured, and horse people in Newmarket and Lexington exude self-confidence. They are on home turf. The landscape communicates the ideal state of the world, which is to live in close contact with God's creatures (the important ones). Every social rhythm—daily, seasonally, annually—reflects their priorities and interests. The dominance of racing and breeding is such that the perpetuation of the central ideas held in common by its professionals is made effortless, inscribed in the physical environment and the social routine. After long periods spent in either town, other ways of thinking become temporarily unavailable.

The study begins with the genesis of the Thoroughbred in the sixteenth and seventeenth centuries and the simultaneous appearance of a distinct type of racing in England. This background sets the scene for the transformation of racing and of the racehorse that took place later in the American colonies. Racing preceded the Thoroughbred in America, and although breeders were quick to spot its commercial possibilities, the ethos of improvement for the sake of the breed was at odds with the society emerging at the time. The result was a creature that represented a mixture of impulses: to improve through breeding, to allow to compete on merit, to improve through intervention, to possess, to restrict, and to preserve inequality, as well as to blow inequality away. The racehorse in America continues to reflect all of these preoccupations.

Another chapter examines the myriad texts that sought to validate the strategy of

selective breeding and to distinguish between bred horses (and people) and their inferior brethren. Whether it was cultural or actual capital that was at stake, the creation of the Thoroughbred as the exclusive racehorse required supporting paraphernalia. This came through the development of stud books, jockey clubs, breeding theories, and books of rules and regulations. In particular, tracts on selective breeding revealed ideas about the essential properties of both people and animals and about the nature of the differences that exist between animals and between people. Next we might ask how horse people make decisions about mating today. What does it mean for a Thoroughbred to be "well bred"? Is the "science" of Thoroughbred breeding actually an art?

Focusing on Newmarket and Lexington, the book uncovers the basis of their association with racing, their distinctive landscapes, and the unique relationships between people and racehorses that they frame. Succeeding chapters offer detailed descriptions of the activities that take place on stud farms, at Thoroughbred auctions, at training yards, on the racetrack, and in the training stable. My aim has been to furnish some insights into the lives of stud hands, stable workers, exercise riders, grooms, vets, trainers, breeders, and the many other people who contribute to the production of the Thoroughbred horse and the spectacle of racing. Many books concentrate upon the excitement and glamour of particular horses and races. I feel that it is important to understand all the relationships that make racing possible, not just those between individual horses and their jockeys and trainers. A day at the races is the first step toward understanding the racing industry. This book goes beyond that first impression and provides the inside track on the fascinating story that lies behind the spectacle, through the words of the people who are best placed to explain it.

I started fieldwork as a rookie Ph.D. student in 1996 and have spent extended periods working in the industry ever since. Some anthropologists offer compelling academic justifications for their choice of field site. In my case, serendipitous connections were as important. As a fieldworker, I have always been more participant than observer, and it was the opportunity to ride racehorses that first attracted me to Newmarket rather than Albania, the first choice of my teachers. Having settled on my field site, I moved to a small village called Westley Waterless, just outside Newmarket, and began exercising polo ponies for my neighbors. The opportunity to ride my first racehorse arose when one of the trainers who drank at my local pub needed someone to cover for a stable worker who had gone on holiday. The entire pub agreed that I would be an excellent stand-in, and the matter was settled—I would start on Monday. I gradually built up a reputation as a reliable, and free, extra hand, working on stud farms, at bloodstock auctions, and wherever I could be of use. What

follows is based upon my observations during this time. I did not conduct surveys or ask people to complete questionnaires. Whom would I have given them to? If I had given them to strangers I wouldn't have known how to interpret their responses. Conversely, why would I ask a colleague, whom I had worked alongside for a year, shoveling muck, sleeping in hostels, and drinking in pubs, to answer a certain set of questions? The anxieties that anthropologists share concerning their presence in the field, the relationship between observing and participating, subjectivity and objectivity, were dismissed by my informants in Lexington and Newmarket. Their main concern was whether I was helpful. They took it for granted that I should want to know about their lives in racing, since they considered themselves experts, with a great deal to teach me.

By the time I arrived in Kentucky I was able to get work on the racetrack on the basis of my existing experience with racehorses. Again, the greatest concern was whether I could be of use. My anthropological project was something of an added bonus to some, including the trainer I worked for. When someone asked "Who's the girl?" as I trailed around after him at the racetrack, he replied, "She's from England. She's an *anthropologist*. I'm teaching her how we do things." For some people on the racetrack I was an amusing novelty. In particular, I was "English" and people liked my accent. They wanted to know about England, especially London, and loved my impression of the Queen. As I worked, filling in for people, grabbing a pitchfork here and there, talking and listening, I learned. My informants, the opinions of whom are recorded and reflected in this book, treated my project seriously and took pleasure in introducing me to people, places, experiences, and ideas that they felt would help me to understand their view of the world. In Lexington, I picked up informants as one would pick up friends in a new neighborhood. A casual conversation in the racetrack kitchen as I collected breakfast for the crew resulted in an introduction to one of my most helpful guides, a Thoroughbred breeder who knew everyone and who ended each conversation by saying, "That reminds me, I must introduce you to . . . " This book is the product of spending time getting to know people, asking questions, and listening carefully. The degree to which I managed to become part of the scene I was trying to understand is reflected in the fact that most of the people I worked alongside still can't believe that I take time out of racing to work as an anthropologist.[7]

This book is based on fieldwork in Newmarket and Kentucky which took place between 1996 and 2004, funded initially by an Edinburgh University Postgraduate Research Studentship and then through the British Academy Postdoctoral Fellow-

ship Scheme. I am very grateful for the support I received from each of these institutions. This book could not have been written without it.

I should also like to thank many friends and colleagues who have provided ideas, support, and encouragement, in particular, past and present students and staff of the Anthropology Department at Goldsmiths College. Harriet Ritvo has been a superlative series editor. Bob Brugger and his colleagues at the Johns Hopkins University Press have also provided invaluable guidance. Marie Blanchard has been an excellent copyeditor.

It has been the utmost privilege to work with racing professionals in Newmarket and Lexington. I trust that this book gives us something to discuss in the future, and I look forward to learning from my mistakes.

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CHAPTER ONE

HISTORIES

In 1881 Iroquois became the first American-bred horse to win the Epsom Derby. He was a small horse, less than fifteen hands two inches high, but he had proved that it was possible for a horse to cross the Atlantic and beat the English horses in their most prestigious race. English journalists, perhaps mindful that their own champions had been bullied out of their birthright by a parvenu, were unimpressed by Iroquois, describing him as "a rough and ready sort of a colt." On the other hand, the American horse racing fraternity was triumphant, boasting that "the victory is a grand one and outside of the success, it goes far to prove that, American bred horses are not inferior to the English." Iroquois's win reflected a rivalry between the United Kingdom and the United States racing worlds made possible by changes in transport. The two sports had developed in uneasy tandem, employing the same breed of horse and, at first, identical rules of conduct. They were also significantly different.[1]

Much of racing history has been written by insiders using their privileged access to produce uncritical, celebratory images of the sport. Certain groups have also received more attention than others: the involvement of the upper classes as owners and breeders and that of the working class as spectators and bettors has been extensively documented, for example. The roles of the middle classes, people of color, and women have received far less attention. In the past ten years, historians including Mike Huggins in the UK and Edward Hotaling in the US have checked this trend. The involvement in racing of people from a wide variety of backgrounds is now well documented, as are the regional and local variations that occurred within national traditions. A more nuanced history has replaced the nostalgia for the past that ran

through racing's most widely cited historical documents, and this has reinvigorated the study of racing society in its broadest sense.

This new approach and data are used here to connect the development of flat racing in the UK with its export to the US. These histories are usually told separately; however, it should be apparent that the connections between racing in the two countries today have deep roots. Connections and discontinuities are highly significant in this context. In both nations, racing has been used to preserve distinctions between groups of people and to express these differences in competitive display. It has also been used to unite the "motley multitude" that has little else in common beyond a desire to take an interest, financial or otherwise, in competition between fine horses. The differences between the two horse cultures emerge from distinctive origins, histories, and technologies. By the time racing was exported to the American colonies it had already begun to change: from the exclusive gentleman's pursuit it had once been, to the national sport and gambling medium it is today.[2]

The origins of flat racing in its modern form are conventionally traced to two events that are often conflated: the inception of the Newmarket Town Plate and the use of Thoroughbred horses. There are problems with this story. Charles II established the Town Plate in 1665 (the first running took place the following year); the Byerley Turk, first of the three Thoroughbred foundation stallions to be imported to England, did not arrive until 1689. The horses raced by Charles II and his courtiers were therefore not yet Thoroughbreds. The Town Plate is viewed as the predecessor of modern flat racing on the grounds that it had rules and more than two runners. Nevertheless, it was a contest of between two and four heats of four miles each, under weights of twelve stone, a very different kind of contest from flat racing today. As the early records of racing contained in the *Sporting Calendars* indicate, the rise of a particular kind of competition between horses in England, which would eventually be exported to the rest of the world, was characterized by false starts, competing visions, and tenacious alternatives. The changes that led to the dominance of one form of racing over another were primarily social and economic. The idea that racing in its modern form was the result of a serendipitous combination of a particularly horsy royal family with a fast breed of horse is only one part of this story.[3]

ORIGINS

Early evidence of horse racing in England appears in Fitz-Stephen's description of London written sometime before 1183, which gives an account of competition between "fine horses" taking place at Smithfield. It appears that the horses in question were being tried against each other before being sold to one of the many

merchants who attended the regular sales conducted there. Discrimination between horses was taken for granted, and "common horses were ordered out of the way" of their superior brethren. Evidence of racing organized solely for competition appears later. Minutes from the York Corporation in 1530 refer to "the ronnynge day of horsys" competing for a prize of a "sylver bell." These early races took place between laterally gaited, heavily muscled sprinters called "hobbies," considered the fastest breed of horse prior to the development of the Thoroughbred. Hobbies were still being raced in 1739, when Galloway, or pony racing, was abolished at York, a reflection of the growing influence of the Thoroughbred at the time.[4]

Until the 1770s, the majority of races in England were matches, usually between two horses, over long distances (often three or four miles) in a series of three or four heats. Records of matches held at Newmarket since 1622 indicate that large sums of money were staked on these contests. In 1720, for example, sixty-seven matches took place. The busiest month was October, when a total of thirty-seven matches were run, four for sums of between one hundred and one thousand guineas (between $193 and $1,932) on a single day. One of the "heaviest" matches recorded was that between the king's horse Herod and the Duke of Grafton's horse Antinous in 1764, over the Beacon course, a four-mile straight in Newmarket. The match was made for one thousand pounds ($1,840), with side bets totaling more than one hundred thousand pounds ($184,048). In what must have been a nail-biting finish, Herod won by half a neck.[5]

Match races (and frequent rematches) expressed rivalries between individuals, regions, and even nations. In 1714, in the final heat of the queen's Gold Cup at York, Leonard Childer's bay mare Duchess, ridden by Robert Hesseltine, opposed Matthew Peirson's Foxhunter, ridden by Stephen Jefferson. During the race the two jockeys slashed at each other's faces with their whips until blood streamed down their cheeks, and when it was over the jockeys leaped from their horses and fought each other. The owners took the matter to court, and they subsequently fought a duel in which Peirson was shot in the thigh and permanently disabled. The north and south of England regularly tested their best horses against each other, most famously in the 1799 match between Hambletonian and Diamond over the Beacon course at Newmarket. Hambletonian, the pride of the north, had won the 1795 St. Leger at Doncaster, one of the five races that came to be recognized as the English "Classics," along with the One Thousand Guineas and Two Thousand Guineas, held at Newmarket, and the Derby and Oaks, held at Epsom. Many of his supporters made the long journey south to see him win by a neck. The US mirrored this rivalry in the famous north-south matches of the eighteenth century.[6]

Multiple-runner matches were also recorded during this period. In 1672, for

example, the diarist Isham described a visit to Rothwell races in Northampton, which epitomized many of the conventions of the day. The prize of two silver candlesticks was placed before the four contestants as they mounted their horses. The horses were owned by four lords, and ridden by a lord, an earl, a colonel, and a commoner. The race consisted of three heats. The Earl of Westmoreland won the first and third, and therefore the match: "flying amid the applause and murmur of success, for the hills resounded with their shout." Colonel Lisle had won the second and been well ahead in the third before disaster struck. He fell off "when in expectation of hearing the palm." According to Isham, the race itself was somewhat overshadowed by an altercation between Mr. Mulcher of Finedon and Lord Cullen's servant, Somers, over who would carve the venison during one of the lulls in the action.[7]

Standardized articles for making a match and other rules of racing appeared in several *Sporting Calendars* in the eighteenth century. These calendars, which emerged as betting became increasingly popular, prepared gentlemen turfites for the coming racing season. The rules seem haphazard and even dangerous to the modern eye but nonetheless suggest a degree of organization and standardization. According to those listed by Pond in 1751, if no weights were specified in the article establishing a match, each horse was to carry ten stone, and riders were obliged to weigh in at the agreed starting post or risk disqualification. Less familiar is the rule that "if a rider falls from his horse, and the horse is rode in by a Person, that is sufficient in weight, he will take place the same as if it had not happened, provided he goes back to the place where the Rider fell." Crossing and jostling were permitted unless explicitly prohibited, presumably increasing the slim possibility that a horse might cross the finish line ridden by someone other than its original jockey.[8]

This was not yet the kind of racing with which we are now familiar, and the calendars contain rules for a number of different kinds of races that have since disappeared. "Give and take plates" were handicaps based on size—"fourteen hands to carry all above, or under, to allow the proportion of 7 lbs for an inch." In "whim plates" horses carried weight according to both age and height. For "post matches" each owner had to produce a horse of a particular age at the starting post at an allotted time. The identity of the horses remained a mystery until the match itself. To organize a "Handy Cap" race, three people placed an equal sum in a hat. The "Handy Capper" suggested a match for the other two, each of whom put their hands in their pockets and pulled them out at the same moment. If both had money in their hands, the match was made. If neither had money in his hands, there was no match and the Handy Capper received the money in the hat. If only one challenger had money in his hand, there was no match but he was entitled to the money in the hat. This variety of racing formats flourished in the absence of any centralized control.[9]

Calendars provided records of the outcomes of match races and gave notice of those yet to come. They also recorded cockfights and details of the extraordinary wagers that were popular at the time. On 29 August 1750, for example, a four-wheel carriage carrying four men and drawn by four horses traveled nineteen miles in fifty-three minutes and twenty-seven seconds, settling a bet between the Earls of March and Eglington. Women were not completely excluded from these activities, and in 1758 *The Idler* noted that the daughter of John Pond, auctioneer and compiler of the *Sporting Kalendar*, had ridden a horse a thousand miles in a thousand hours in order to win a bet of two hundred guineas ($386). The material recorded in the calendars indicates that racing was at the time still part of a complex of leisure activities that were the preserve of the well-heeled. At the same time, the presence of stallion advertisements and selected pedigrees also indicates the burgeoning commercial importance of producing racehorses.[10]

Early *Sporting Calendars* also contained some evidence of attempts to control the sport, including an extract from a law passed by Parliament in 1740 forbidding match racing and establishing a lower limit to prize money of £50 ($88). The two most important racing centers, Newmarket and Hambleton in York, were exempt from both these rulings, suggesting that they may have been capable of resisting attempts to control them. The act also established standard weights for age, limited owners to a single horse in any race, and stated that all races should be completed in one day. The act was an early attempt at regulation, but it was flouted to the extent that in 1809 36 percent of races in Britain were still matches. Although unevenly adopted, it marks the beginning of the reduction in importance of parochial meetings and the increase in the dominance of regional centers: the transition of racing from a local entertainment to a national sport. The rapid emergence of the paraphernalia that defines flat racing in its modern form followed.[11]

The first racing calendar was produced by John Cheny in 1728, and alternatives by Pond, Pick and Tuting, and Fawconer soon followed. The Jockey Club was formed in Newmarket in 1751 or 1752. At the time, the word "jockey" referred to people with an interest in horses, and the club was an association of like-minded owners and breeders, rather than riders. In 1770, James Weatherby was appointed "Keeper of the Match Book" at Newmarket and secretary of the Jockey Club, marking the beginning of a long association between racing and the Weatherby family that is ongoing. In 1773, he took responsibility for the *Racing Calendar*. The first three Classic races, the centerpieces of the kind of racing that is still popular today—run in accordance with Jockey Club rules, over relatively short distances and under light weights—were established in 1776 (Doncaster St. Leger), 1779 (Epsom Oaks), and 1780 (Epsom Derby). The One Thousand Guineas (for three-year-old fillies)

and Two Thousand Guineas (for three-year-old colts), both run at Newmarket, appeared later, in 1814 and 1809 respectively. The final piece of this jigsaw, the *General Stud Book* (GSB), a collection of Thoroughbred pedigrees, was first published by James Weatherby, nephew of the first James Weatherby, in 1791.[12]

Until railways transformed the scene in the 1840s, most race meetings were annual events. In 1753 even racing-mad Newmarket offered only spring and October meets. By 1833, seven meetings were held each year, but nowhere else were more than two held. Outside Newmarket, racing was part of annual local festivities that also included cockfighting, prize fighting, wrestling, and foot races of various kinds, including competitions for women. Local meetings were organized by businessmen in order to bring customers to their towns, and they attracted crowds of all classes and ages. Men, women, and children earned a more or less legal living from these crowds by working as pickpockets, prostitutes, ballad singers, thimble riggers, card sharpers, astrologers, and sooth sayers and by selling food and liquor. A carnival atmosphere prevailed, and behavior that would have been unacceptable outside such events was tolerated, if reluctantly. The suburban courses around London were notorious in this regard. According to contemporary reports, the police rarely intervened, "consulting their own safety in flight." During the eighteenth century, when betting was restricted to individuals, often from the upper classes, these meetings were primarily local holidays, time set aside for relaxation and indulgence. Racing was not their sole attraction.[13]

By 1839 the Derby crowd was estimated at 250,000, including "vast numbers" of ladies. Railways swelled the numbers of spectators and reduced the local flavor of meetings. The enclosure of many racecourses during the 1880s changed the composition of the crowd, reducing the number of working-class men and women and restricting access to those who could afford to pay an entrance fee. Upper-class women were better served by enclosure, enjoying greater protection from the unruly element as well as enjoying the ladies rooms and other facilities intended specifically for their use. However, in terms of behavior, even though some of the bawdiest diversions were lost after enclosure, racecourses remained liminal zones, immune to the restrictions of everyday life, self-regulating according to a code of honor that was highly flexible and based upon the acceptance of trickery and cross-class activities, but not the absence of morality. The racecourse maintained its own proxy justice system, and those who reneged on a bet were never tolerated. In 1856, for example, the clerk of the course at Catterick provided the services of a number of local lads and a tar barrel for the benefit of welchers at his meeting.[14]

Racing had been highly structured and organized in Newmarket since the mid-1700s, but until 1870, as Huggins has shown, Jockey Club rules were incompletely

adopted elsewhere. By 1870, the club had grown sufficiently powerful to issue a threat to exclude those who took part in meetings that were not "recognized" (run under their rules). Only a few local meetings continued to take place outside their control. During the 1800s, racing in Britain was transformed from a local entertainment governed by a variety of rules enforced by local businessmen to a national sport with a single set of laws enforced by a national authority. The change had been made possible by the growth of the betting industry and the expansion of the railways. Writing in 1856, racing correspondent The Druid noted that "the whole system of betting has undergone a complete change in the last sixty years." What had been a transaction between owners had, he felt, "degenerated into a science." According to the *Racing Calendar*, 36 percent of races held in 1809 were traditional match races, and every meet included some races run as heats. By 1869 only 3 percent of races were matches, and heats had almost disappeared. This suggests that some of the most important innovations within racing occurred much later than the Restoration, and that they were driven not by royal inspiration but by the pressures of the betting industry. Speed replaced stamina in importance: races became shorter, the horses competing in them younger. The complete shift to sweepstakes (races of multiple runners, owners of each to contribute toward the prize money) and handicaps, where weights were carried according to ability, took place between 1740 and 1870, with Newmarket acting as the trailblazer. Both provided a far superior betting medium than the match races of the preceding era. The transformation of racing and the growth of the betting industry during the nineteenth century were enabled by increased access to racing forms in the popular press, the communication of results via the electric telegraph, and improvements in transportation for both runners and spectators.[15]

THE THOROUGHBRED

Thoroughbred history concentrates on three stallions imported during the late seventeenth and early eighteenth centuries to whom all modern Thoroughbreds in the world can trace their ancestry through the male line. The effect of the focus on the three stallions is to produce an idea of the Thoroughbred as a mythical beast, reproducing asexually and thereby preserving male attributes directly without the dilution or perhaps pollution introduced by a (female) mate. This vision has never been completely dominant in the Thoroughbred breeding world, and it would have been anathema to the custodians of the breed's Arabian ancestors, who traced their pedigrees through the female line. The three stallions destined to become identified, retrospectively, as the founding fathers of the breed were the Godolphin Ara-

bian or Barb (imported to England c. 1729), the Darley Arabian (imported c. 1704), and the Byerley Turk (imported in 1689).[16]

The origin story of the Thoroughbred racehorse is controversial. Some experts, including the intrepid Lady Wentworth, described the breed as descended entirely from Arabian horses imported from the Middle East, North Africa, and Europe. Others credit these imports with little influence over what they regard as an English breed. These disagreements evoke ideas about the relative merits of the Arab and the Englishman loosely disguised as discussions about horses. The origin story is further complicated by the contested identities of individual horses. Early records are notoriously contradictory, partly because of the practice of a horse taking its name from its owner and therefore changing its name upon being sold, and partly because of the practice of inbreeding, often to incestuous degrees. In the early breeding records a single name may also refer to several animals, as in the case recorded by Pond in 1751, where Mr. Ann's horse Partner is described as "got by Partner, his dam by True Blue." Recent research using Thoroughbred DNA indicates that the recorded pedigrees of many of the foundation mares contain inaccuracies.[17]

The Thoroughbred is essentially an expression of empire. The hybrid names of the three progenitors, fusing Eastern origin with English owner, express this point emphatically. The portraits of Thoroughbreds by George Stubbs (1724–1806) and John Wootton (c. 1682–1764) are early examples of brand management. Paintings such as Stubbs's *Pumpkin and a Stable Lad* (1774) are quintessentially and identifiably English, with a background of pastoral calm complete with babbling brook and weeping willow. The Thoroughbred needed constant attention. Whistlejacket, for example, the subject of Stubbs's most famous equine portrait (painted in 1762 for one of his greatest patrons, the second Marquis of Rockingham), was only two generations away from being an Arabian horse (his father was Mogul, whose father was the Godolphin Arabian).[18]

Although the origin of the Thoroughbred is contested, it seems to have emerged from an acceptance that, during the sixteenth century, English horses were dangerously small, light of frame, and lacking in stamina. Great anxiety was expressed at the time regarding their lack of quality. Both Henry VIII and Elizabeth I introduced extensive legislation that was intended to encourage the breeding of superior animals: the export of horses was prohibited in 1531, and in 1535–36 and 1541–42, nobles were commanded to regulate the size of their stock, culling those under a certain height from their herds. The historical association between military responsibility, patriotism, status, and the horse was enshrined in law at this time. There was also a change in military tactics, from the use of huge chargers or "destriers" as the equivalent of equine tanks, to a preference for slighter breeds with greater speed and

agility, more similar to the Thoroughbred and its predecessors. English stocks were also boosted by gifts of horses. In the spring of 1514, for example, Henry VIII received a shipment of bloodstock from the Marquis of Mantua. This gift and others like it are thought to have contributed directly to the Thoroughbred foundation stock. Extravagant gifts of horses were by this time well recognized as expressions of sympathy between imperial rulers. The gift of a horse was a gesture of friendliness as well as a plea for international recognition on the part of competing regimes.[19]

As well as by imperial gifts, the stock of English studs was swelled by spoils of war. According to Prior, the most authoritative historian of the royal studs, the Byerley (sometimes "Byerly") Turk, the first of the three "founding fathers" to come to Britain, was captured from a Turkish officer at the siege of Buda in 1688 by Captain Robert Byerley of the Sixth Dragoon Guards. Robert Byerley was the son of Colonel Anthony Byerley of Middridge Grange, an officer in a unit known as Byerley's Bulldogs under Charles I. In 1688 Byerley junior became a colonel and married Lord Wharton's grand-niece, Mary, forming one of the many alliances that existed between horse breeding families of the time. The next year Lieutenant Colonel Byerley fought in the Battle of the Boyne, escaping the enemy only thanks to the prodigious speed of the Turk.[20]

Between battles, the Turk was running in races. However, his most significant contribution was made not on the racecourse or on the battlefield but in the breeding shed. His fastest son was Basto, bred by Sir William Ramsden and sold to the Duke of Devonshire. As in many Thoroughbred families, the fastest son did not breed the fastest grandsons, however, and his most influential son was Jigg, himself slow, who sired Partner, who sired Tartar, who sired Herod, the most significant of the Turk's descendants, the sole link between him and his modern descendants. Herod, originally King Herod, was bred by the Duke of Cumberland and foaled in 1758. Like many modern racehorses, he combined talent with fragility. He was fast, with weak forelegs, and was a "bleeder," a horse prone to bleeding from the nose after the exertion of a race. His stud fee was initially ten guineas ($19), rising to twenty-five ($48) when the fortunes of his offspring improved. His issue won over £200,000 ($353,000), forty hogsheads of claret, three cups, and the Whip (the prize for a match race between Jockey Club members that is still run today, though with little fanfare). He died at the age of twenty-two in 1780. Herod made the Byerley Turk famous.[21]

In contrast to the military exploits of the Turk, a number of romantic stories surround the Godolphin Arabian, though little of certainty is known of him. He is thought to have been one of several Arabs presented to the king of France by the Bey of Tunis, imported to England in 1729 by Edward Coke, and left to Roger Williams on Coke's death. Coke had bequeathed his mares to the Second Earl of Godolphin,

who bought the Arab from Williams in 1733. The Godolphin Arabian finally acquired his name. The Arabian has at least one book devoted to him, perhaps because of the heroic (but almost certainly apocryphal) story about him that appears in the *General Stud Book*. In the introductory volume of the publication (1791), James Weatherby described the Godolphin Arabian as a brown horse, fifteen hands high, with a fondness for the cat that appears in his portrait. In volume 1 (1793) he added that the Arabian was "teaser to Hobgoblin for several years" and "on the latter refusing to cover Roxana, she was put to the Arabian, and from that cover produced Lath." In the 1808 edition of the studbook Weatherby makes a tantalizing reference to a Frenchman who told him that the Godolphin Arabian had once pulled a cart in Paris, and he mentions his regret at not questioning this man further.[22]

The story has become one of the best-known love stories in the racing annals. The villain of the piece is Hobgoblin, the brilliantly named baddy. The story begins with the Godolphin Arabian pulling a water cart on the streets of Paris. Even in these reduced circumstances, his innate quality shone through and he was liberated from his shackles and imported to England, where, confusingly, he was put to work on a stud farm as a teaser. A teaser is an entire horse, but not a stallion, since his role is not to cover mares but rather to test their receptivity, before the stallion takes over. The role of teaser reduces the work of the stallion and ensures that disappointments will not encroach on his libido. Mares reveal the status of their ovaries by squealing, biting, and kicking, and so the teaser also protects the stallion from physical injury in the line of duty.

The teaser is not, strictly speaking, part of the reproductive process, and his status on the stud is lower even than the mare. It seems perverse to import a horse from France in order to perform this role. However, the story goes on to describe his encounter with Roxana, who responds favorably to his advances. Hobgoblin is in the wings, ready to take advantage of the Arab's expert foreplay. The two stallions fight, butting heads, and the Arab wins, taking the prize of Roxana. The outcome was Lath (b. 1732), one of the best horses of the era, and so a legend was born. The former teaser was promoted to the main draw. Little credence can be given to this description of the toils of the Godolphin Arabian, though the story itself reveals the traits that are comfortably associated with a great stallion, and it remains a central part of the popular history of the Thoroughbred as a breed. The Godolphin Arabian's qualities are evident even when he is in poor condition. He rallies against adversity. He fights when necessary, and in the height of battle shows no fear and no mercy. He gives no quarter and expects none in return. He takes the prize and, perhaps most importantly, Roxana throws a foal that grows up to be a great racehorse. He is violent, courageous, sexually active, potent, and capable of reproducing his talents in his offspring.[23]

The exact breeding of the Godolphin Arabian has attracted a great deal of discussion. Richard Berenger, "Gentleman of the Horse" to George III, described the Godolphin Arabian as plain-headed with lop ears, certainly not Arab traits. The connoisseur of Arabian horses attends particularly to the "jibbah," the forehead, which should be bulging, the "mitbeh," the junction of the throat and head, which should be smooth and therefore suggest good wind, and the ears, which should be small, expressive, and tapered toward each other. "The ears to be perfect should be so placed that they point inwards, so that the tips may almost touch; the outline of the inner side of the ear should be much curved, and, as it were, notched about half way down." Lop ears would constitute a serious flaw in an Arabian horse, or suggest that this was no Arab.[24]

Doubts concerning the Godolphin Arabian's origin may have been prompted by the belief that he had come from Tunisia. Critics often refer to the series of portraits by David Morier, John Wootton, and J. N. Sartorius, which seem to give him a crest that would have been considered a Barb, rather than Arabian, trait. Owners Edward Coke and Lord Godolphin, and vet William Osmer, always referred to him as an Arab. However, somewhat confusingly, Osmer also referred to the plainness of his head. Other writers merely stated that, whatever his origin, his excellence could be likened to that of an Arab. It is clear from these discussions that it would be more appropriate for Godolphin's stallion to be an Arab rather than a Barb, even an Arablike Barb. By 1873, Upton was sufficiently suspicious about the breeding of the Godolphin "Arab or Barb" to be scathing about his offspring. Although the pedigrees of the three founding stallions are unknown, Upton claims that the Darley Arabian had become the dominant line because he was the purest bred. His potency was considered sufficient, if retrospective, evidence of his (unknown and unknowable) good breeding.[25]

According to the latest DNA evidence, approximately 95 percent of today's Thoroughbreds can trace their male lines to the Darley Arabian, acquired by British consul Thomas Darley in Aleppo, Syria, in 1704, for his brother Richard. The Darley Arabian stood at Aldby in Yorkshire and was the great-great-grand sire of the unbeaten Eclipse (b. 1764), the founder of the male line that has survived to this day. Eclipse was bred by the Duke of Cumberland but was owned during his racing career by Colonel Dennis O'Kelly, an Irishman who rose through the ranks of the Westminster Regiment of Middlesex Militia. O'Kelly made a fortune from Eclipse's first race, in May 1769. Eclipse ran in twenty-six races, including eighteen prestigious King's Plates, and his superiority to the rest of his generation is neatly summed up in the saying with which he is most famously associated, "Eclipse first, the rest, nowhere." The most influential male line of the three to survive was initiated by the

Darleys, successful merchants based in the north of England, and managed at its most critical moment by Dennis O'Kelly, a heavy gambler, from a modest Irish background. This remarkable line is a reminder of the importance of commerce and opportunity to the history of the Thoroughbred, which is often reduced to a story of royal patronage and inherited advantage.[26]

By the time that Arabian horses attracted the interests of European traders, the Bedouin had been selectively breeding their own horses for generations, and by their standards the Thoroughbred was a crossbreed and a parvenu. However, the development of racing of a highly specialized variety and its endorsement by the most influential individuals of the most powerful nations resulted in a fit between the Thoroughbred and racing excellence that the Arab could no longer challenge or displace. The breed's superior powers of endurance attracted scant appreciation where the onus was on sprinting short distances, and imports gradually diminished. At the end of the nineteenth century, when there was a vociferous movement to reintroduce Arab stallions, other breeders not only rejected this strategy but also asserted that the excellence of the Thoroughbred could be traced to the accumulation of "English" horses rather than to those that had been imported. A conjuring trick was performed. Horses imported from the East, on export to the rest of the colonies, were used to represent the quintessential properties and achievements of the motherland.[27]

RACING COMES TO THE AMERICAN COLONIES

The first equine colonists arrived in Jamestown, Virginia, in August 1610 only to be eaten that winter. In 1611 seventeen replacements were sent by Sir Thomas Dale, in 1614 more were captured from Nova Scotia, and by 1620 the Virginia Company had sent twenty-four more. By 1649 it was noted that "there are in Virginia, of an excellent raise [*sic*], about two hundred horses and mares." The beginnings of racing in the United States have conventionally been traced to the Cavalier migration of 1650, on the grounds that "the Cavalier was the natural fosterer of the Turf, while to the Puritan it was anathema." In accordance, Barnum Culver's *Blooded Horses of the Colonial Days* (1922) reserves eight chapters for Maryland, five for Virginia, and one each for the Carolinas, New York, Pennsylvania, and Colonial New England. According to Culver, racing in the colonial era was a means of preserving the continuity of the way of life of the English nobility in the New World. Racing authority correlated with political power, and it was no coincidence that every member of the first King's Council of Virginia had either raced or bred horses in England. This presents a view of standardization and continuity that was common among American racing

historians writing in the early twentieth century, but is not necessarily borne out by other more recent sources.[28]

The first Thoroughbred did not arrive in Virginia until 1730, and the races that took place before this time were between horses of a variety of breeds. Pony racing, with weights assigned by height, took place between imported Scottish Galloways in Virginia in the 1670s, over distances between one and four miles. Quarter Horse races took place through town streets, which had the advantage of being flat and fairly straight, and clear of tree stumps. The best of this type of racing horse was known as the Quarter Pather, or "Celebrated American Quarter Running Horse." Court records and descriptions written at the time indicate that the social mix at Quarter Horse races was more fluid than was to be the case at the Thoroughbred equivalent. The fact that these were horses of no particular breeding, and that races were held on streets or in fields rather than on specially constructed racecourses, suggests that they may have provided a route into racing for anyone fortunate enough to own a horse. This (at least) two-tier system implies that racing may not have been the exclusive pleasure and badge of status that some racing historians would have us believe. Specifically, racing in America was not restricted to the descendants of Cavaliers and their blooded horses.[29]

Match racing in the colonies attracted some of the same kind of action as did racing in England before the enclosure of racecourses: cockfights, wrestling, and most of all, drinking. Racetracks were laid out beside taverns, and landlords sponsored the action in anticipation of a heavy-drinking crowd. Quarter racing was a mixed-race, cross-class spectacle. Hotaling describes a match race in Brunswick County, Virginia, in 1773 as "America's biggest sporting event yet," attracting a crowd of thousands of Americans, the largest number gathered together until at least fifty years after the Revolution. The crowd included families of English Americans, African Americans, Native Americans, Scots, and Scots-Irish. From the mid-1600s to the Civil War, the majority of jockeys competing in quarter races were slaves, some of whom Hotaling describes as having achieved a kind of independence through their professional activities. In particular, he credits Austin Curtis with having "defeated slavery" through his dominance of the sport.[30]

Quarter Horse or match racing continued throughout colonial times, and continues today. Thoroughbred racing began to increase in popularity once a more demanding infrastructure could be put in place. In 1664, when Sir Richard Nicholls accepted the surrender of New Amsterdam and became the first governor of New York, he hurried to lay out a racecourse on Long Island. Finished in 1665 and called Newmarket, it was America's first full-sized racecourse. The governor's stated concern was to provide facilities that might contribute to the improvement of the breed.

The principle races, known as "subscription purses," took place over two miles under weights of ten stone, and the horses competing were known as "Dutch horses," in that they were descended from stock imported from Utrecht. Perhaps surprisingly, the first jockey club in Britain or America was formed in Charleston, South Carolina, in 1734. It was said at the time that in Charleston there existed "a type of society essentially more aristocratic even than in Virginia." In Virginia, the popularity of betting on races held on the one-mile round courses that were springing up all over disused tobacco land meant that by 1727 it was necessary to legislate against gamesters. This legislation neatly illustrates the dual potential that racing offers any society, to preserve existing inequalities and to vividly express those inequalities in a socially accepted way, and to create upheaval through the unpredictable rewards of gambling. Alongside the tracks like Newmarket, constructed by a governor intent on the improvement of the breed, were numerous others created by gambling syndicates, motivated by profit.[31]

The first recorded regular races to take place in the US between horses of known breeding were at Annapolis, Maryland, overseen by Governor Ogle. They were advertised as having a fifteen-shilling entry fee for any horse, mare or gelding (Old Ranter and Limber-Sides excepted) to carry 115 pounds over a two-mile course in three heats at John Conners's place. The prize was £5 ($8.82). The reason for excluding Old Ranter and Limber-Sides is not given, but presumably they were far superior to their peers and people were tired of taking a beating. The first announcement of a Thoroughbred race in Virginia was made in the *Virginia Gazette* on 14 December 1739, to be run for the prize of a forty-shilling saddle at the mile course at Williamsburg. Cheswell's horse Edgecomb triumphed. From this time on, Thoroughbred racing gained ground at the expense of Quarter Horse racing. Quarter Horse matches were sport, and wagers were often matters of personal honor. Thoroughbred racing was explicitly aimed at the improvement of the breed, although commercial interests were evident from the start in the considerable investment in infrastructure and import of horses. The rise of course racing was made possible by the arrival in Virginia of increasing numbers of Thoroughbred horses.[32]

Bull (or Bulle) Rock, a son of the Darley Arabian, was the first Thoroughbred to arrive in Virginia, in 1730. He was already twenty-one years old and the first of a number of "bred" horses to be imported from England and occasionally from Spain and the West Indies. Later English-bred imports Janus, Fearnought, and Traveller were more influential. Janus (raced in England under the name of "Stiff Dick") was described as "foul sinewed," a reference to bowed tendons. He was short (just fourteen hands), stocky, and prolific. Often bred to his daughters and granddaughters, he produced runners with speed but little stamina. Not surprisingly, given the emphasis

on sprinting in the sport, Janus is one of a few Thoroughbreds to appear with regularity in the pedigrees of Quarter Horses. The fact that he could lack distinction in both appearance and achievements and yet exert such an influence is still referred to by the British racing fraternity as evidence of the inferiority of the American Thoroughbred. Fearnought was imported by John Baylor of Caroline County in 1764. He was chosen from a list of twenty candidates provided by Baylor's agent in England, one of the first international Thoroughbred bloodstock agents. Fearnought was tall (fifteen hands three inches), good looking, and highly influential. Traveller (by Croft's Partner out of Croft's Bay Bloody Buttocks by Bloody Buttocks), third of this triumvirate of influential sires, also crops up in many of the oldest pedigrees in America.[33]

According to Mason's *Gentleman's New Pocket Companion*, a handbook that was popular enough to produce at least seven editions following its first publication in 1811, the rules of racing applied in the colonies were derived from English practice. The English rules of racing are printed in full by Mason, though—slightly worryingly—this version is described as having been extracted "from a Liverpool paper," which sounds like a cliché of unreliability to an English ear. Mason also reproduces the rules and regulations of the Richmond Jockey Club as applied at New-Market, near Petersburgh, the oldest and most popular course in Virginia. He states that these rules are the norm for most of the courses in Virginia, and they provide a fascinating insight into the priorities of the governors of racing at the time. Some of the rules are charming: "The Stewards shall be appointed by ballot and serve for one meeting next succeeding their appointment. They shall wear a white rose on the left side of the cape of their coat." Some are more prosaic, including the declaration that $2 will be offered for every dog killed. Others, including rule 27, are clearly an attempt to preserve the gentility of an occasion when women would be assumed to be present: "No stud horse shall be exhibited within the walls of the course until the ladies have retired." Perhaps the most important rule is number 32: "New members can only be admitted upon recommendation." Since only members could start horses, unless an owner was prepared to pay double the entry fee, rule 32 was the mechanism by which the club boundaries were policed.[34]

The development of racing and of the Thoroughbred in the American colonies was temporarily halted by the Revolution. Racing was suspended in 1774, and the breed neglected. When peace was agreed, racehorse owners lost no time in resuming their activities. Jockey clubs met in March 1783 in Maryland, Virginia, and the Carolinas. According to American racing historian John Hervey, writing in 1944, the nature of the industry had changed forever; the amateurism of pre-Revolutionary days was replaced with unseemly commercial interests. Hervey, like Culver, saw pre-

Revolution racing as a template for stable, conservative social arrangements and as a support for the existing hierarchy. After the Revolution, he argued, racing in America offered commercial opportunities to those capable of exploiting them. The requirement of nobility in importing, breeding, and racing horses was replaced by an ability to pay. This difference is exaggerated. Other kinds of racing flourished and commercial considerations played a significant role in the pre-Revolution import of Thoroughbreds. The image of post-Revolution racing as a model for the playing out of unfettered market forces is also inaccurate: vested interests survived the Revolution, as is clear from the membership of the American Jockey Club. The contrast is overstated, as it is in the history of racing in the UK.[35]

After 1783, American breeders continued to import horses from England, including Diomed, who had won the first running of the Epsom Derby in 1780. Diomed came to Bowling Green, Virginia, under the guidance of John Hoomes in 1798, bought for fifty guineas ($97) from Charles Bunbury, who was eager to wash his hands of a horse that had proved a total failure at stud. He was sold on for £1,000 ($1,840) in 1799. Hoomes's successful investment reflects the commercial opportunities of the time. Diomed obviously enjoyed the change of scenery, as he got more than a dozen good runners for his adopted country and started a dynasty through his best son Sir Archy (b. 1805). Sir Archy sired Timolean, who in turn sired Lexington, hero of the pre–Civil War racing scene.[36]

Regional differences dominated the development of racing and breeding in the US. After the Civil War, Puritan opposition in the north delayed the return of racing, and this opposition has resurfaced at intervals ever since. By the end of the eighteenth century, racing had been abolished in New York, though it was resumed for a five-year trial period in 1821, on the Union Course, the site of all the major north-south matches, including the most famous of all, Fashion vs. Boston, in 1842. Washington's national course, established in the early years of the 1800s and patronized by Presidents Jefferson, Adams, and Van Buren, was closed down by the middle of the century. Moving south and west, racing shadowed the expansion of the frontier westward, and a racecourse was opened in San Francisco in 1851. After 1865, the devastation of the South reversed this trend, and the North flourished once again. Kentucky and Tennessee fared better than their neighbors: by the 1840s, Kentucky could already boast the most racecourses of any state, with four more than the established racing state of Virginia.[37]

After the Civil War, the kind of racing that enjoyed greatest public support involved young Thoroughbreds racing over short distances on oval dirt tracks. Hervey described the abandonment of the second turf course to be built on Long Island, in 1825, as marking the disappearance of "everything but dirt tracks from the racing

map practically forever." In 1886 the Jockey Club constructed a turf track on the inside of the dirt track at Coney Island, setting a precedent for track layout that continues today, but the majority of racing since the nineteenth century has taken place on dirt ovals, the specialist surface and layout of American racing. The Kentucky Derby was established in 1875, and its distance of a mile and a quarter (quarter of a mile shorter than the English equivalent) hinted at the emphasis on speed that would dominate the US in the future.[38]

AMERICAN THOROUGHBREDS RETURN TO ENGLAND

By the end of the nineteenth century the flourishing American racing industry had attracted the attention of the government. Anti-gambling laws introduced in many states between 1900 and 1913 led to the collapse of racing in its new centers, including Saratoga, and an increase in the number of horses imported to Britain and Ireland in order to race and breed. The export of American Thoroughbreds to the UK created a dilemma for the English Jockey Club. Before 1900 horses had been eligible to enter the General Stud Book by fulfilling either of two entry requirements. Either they could trace their origins to horses already entered, or they were entered in the Thoroughbred studbooks of their own country. The influx of horses from the US prompted a rethinking of the dual-entry system by British breeders who were concerned about competition with their own home-bred stock.

Entry to the American Stud Book at the time required evidence of an uncontaminated pedigree for five generations; however, British experts pointed to the relative youth of the Book, which was founded in 1868. In particular, the pedigrees of horses like Lexington (b. 1850), present in a considerable proportion of American-bred horses, raised problems. Lexington was by Boston, by Timolean, whose parentage (thought to be by Sir Archy, out of Saltram Mare) was disputed. The clash between UK breeders, eager to preserve their monopoly over the right to decide what was and was not Thoroughbred, and US breeders, trying to find an outlet for horses that were obsolete at home, reached a climax with the introduction of the Jersey Act in 1913. Lord Jersey recommended to the English Jockey Club that Weatherbys recognize only animals that could be traced without flaw to horses already registered in the GSB. Some existing entries could not have fulfilled this requirement: these so-called "short-pedigreed" horses were not excluded, but no additions were allowed after this time. The UK racing establishment flexed its muscles and won the battle, but their victory was short-lived.[39]

Racing in the US recovered after a New York ruling that oral betting on course was not illegal, and by the 1920s it was booming. Meanwhile, having established a

presence in Newmarket, American horses that did not qualify for entry into the GSB were regularly beating the best of the UK-bred registered Thoroughbreds. American and French "half-breds" had also won the French Derby in consecutive years (Pearl Diver in 1947, My Love in 1948) and their dominance was threatening the integrity of the *GSB*. After all, what was the point of a closed studbook if it excluded the fastest horses? In 1949 the rules were amended, reintroducing the double-entry system. According to the new rules horses had to "prove satisfactorily some eight or nine crosses of pure blood, to trace back for at least a century, and to show such performances of its immediate family on the Turf as to warrant the belief in the purity of its blood"—with the proviso that "the publishers reserve to themselves the right to decide what horses or mares can, under the above qualifications, be admitted or excluded from the Book." The year 1913 marked the last time that the English Jockey Club was able to exert its influence in order to protect its constituency by controlling entry to its most sacred tome. By 1949 it was apparent that to exclude the American Thoroughbred from the General Stud Book risked creating a faster rival breed.[40]

The Thoroughbred was created by British aristocrats, gentlemen, and merchants, under the patronage of kings and queens, from purchases, gifts, or spoils from friendly or competing empires, initially to fulfill a military remit. These horses were raced by their gentleman owners in competitive matches upon which considerable sums of money were staked by the owners and their friends. When a new kind of racing emerged, which was more amenable to betting among all comers and involved shorter distances under lighter weights, racing became a national sport and the breed proved unbeatable. The English style of racing was exported to the empire, including the American colonies. Where heavy forests prevented the construction of racecourses, Americans satisfied their desire for sport with Quarter Horse racing, which took place between fast horses, cheered on by a diverse crowd and ridden by both black and white professional and amateur jockeys. Since 1665, when the first racecourse was built on Long Island, Quarter Horse racing and course racing have coexisted in the United States.

When the Americans required Thoroughbreds to populate their tracks, the English sent them the aging Bull Rock and the useless Diomed (already a failure at stud), happy to wash their hands of them. Nevertheless, American breeders succeeded in producing fast, strong horses, at first on the East Coast, and particularly in Virginia and Maryland, and later in Kentucky and Tennessee. English racecourses were undulating circuits or straights on grass, unsuited to frequent use and often only partially visible to a spectator on foot. The Americans created the "merry go round," a circular mile dirt track, and produced horses that became increasingly adept at running around it. The merry go round increased the number of races that could be

held each day and the number of days that racing could be held at any one track during the year. It maximized the volume of betting opportunities and created massive demand for Thoroughbreds capable of providing the kind of racing favored as a gambling medium. Under these circumstances, the bloodstock industry in the US flourished, and in 1881 Iroquois shocked both nations. By 1949 the American racehorse was no longer inferior to the English, and the English Jockey Club could not exclude the American-bred Thoroughbred without making itself look ridiculous.

Racing in the US was initially dependent upon ideas and horses imported from the UK, but it quickly developed its own distinctive identity. Today, the vast majority of racing in the UK takes place on turf, the vast majority in the US on dirt. The median length of races in the UK is greater than in the US, where 49 percent of races take place over less than a mile and would be categorized as sprints in UK terms. The pedigrees of the horses reflect these specializations. Horses with what is thought of as typically North American bloodlines are expected to excel over short distances on dirt. Horses with typically English breeding are expected to run further on grass. Both continue to appear in the GSB. The disparate origins of racing in the US and the UK continue to influence the self-images of racing professionals of both nations and their ideas about each other. Before I left for Kentucky, my UK informants warned me of the tedium of racing in the US, its lack of subtlety, a result of the standardized tracks and distances. When I arrived, I was told that racing in the UK was "undemocratic," and that I had come to the place where true quality shone through, regardless of class or race. The rest of this book examines this apparent contrast in more detail.[41]

The argument that racing was transformed from an aristocratic gentleman's pastime to a democratic national sport by the influence of the betting market is only one side of this story. The sport includes two distinct but related spheres: the consumption of racing as a betting medium and the production of Thoroughbreds. The focus of this book is the most conservative aspect of the sport, and perhaps the least well understood: the production of racehorses and the making of racing. Later chapters explore contemporary Thoroughbred breeding in Kentucky and Newmarket. The next chapter launches this inquiry by describing the parallel development of theories of breeding racehorses in the US and the UK. These theories reveal preoccupations with heredity, race, class, and gender that are common to the international bloodstock industry as well as specific to each nation.

CHAPTER TWO

THE RIGHT TO BE WELL BORN

Despite the transformation of racing that took place in the United Kingdom in the nineteenth century and the distinctive character of racing in the United States, one thing remained constant: the use of Thoroughbred racehorses. The first step in the creation of the Thoroughbred was to distinguish it from other kinds of horses. As this chapter explains, this was done on the basis of pedigree. The next step was to distinguish between Thoroughbreds. Breeding manuals were first produced in the UK, and later, as the US Thoroughbred population grew, in America. Early breeders were particularly interested in the relative influence of male and female parents over their offspring and in the relationship between heredity and the environment. The manner in which these concerns were raised relates to the distinctive histories of the US and the UK. In the UK, breeders expressed their ideas in relation to class; in the US they employed the newly available language of eugenics.

The Thoroughbred emerged as a distinctive breed in the eighteenth century; however, its creators made use of ideas that have a much longer intellectual trajectory. Comparisons between the selective breeding of animals and the management of human populations were a recurring theme in classical philosophy. In *The Republic*, written during the fourth century B.C., Plato discussed the importance of selection in producing superior dogs, birds, horses, and people. He used an analogy between humans and animals in order to support his argument for the abolition of the family among the guardian caste, one of the endogamous groups that form a part of his ideal society. Despite revolutions in biomedicine, and specifically in ideas about generation, embryology, and heredity, analogies such as those put forth by Plato are tenacious and have appeared in racehorse breeding manuals from the

inception of the Thoroughbred to the present time. As Ritvo has shown in relation to breeding practices in Victorian England, theories of heredity concerned with favored animals, including racehorses, reflect prevailing ideas about gender, race, and class in the human societies in which they appear.[1]

There is agreement among racing professionals that "blood will tell," but there have also been endless differences of opinion concerning the details of breeding practices. These disagreements concern the relative influence of the mare and stallion, the importance of conformation, the ability or age of the mare or the stallion, and so on. But the resolution of disputes such as these is secondary to the shared belief that the improvement of the Thoroughbred will come about through selective breeding. Despite William Osmer's 1756 *Dissertation on Horses*, "wherein it is demonstrated, by matter of fact, as well as from Principles of Philosophy, that Innate Qualities do not exist, and that the excellence of this Animal is altogether mechanical and not in the Blood," the argument that reductions in the winning times of races can be achieved through improvements in veterinary care, racing surface, or training regime is relatively undeveloped. It is highly instructive that, until recently, the primary role of the veterinarian was to improve the fertility of the mare—to ensure that she cycled regularly and thus provided foals annually.[2]

The most striking fact of the Thoroughbred breeding scene is that although there have been varying degrees of success among breeders at different times, no breeder has been able to consistently repeat the successes or avoid the disappointments that the quest for champions inevitably entails. The fact that ability cannot be predicted with any certainty from pedigree has not stopped the development of a large community of pedigree experts, along with an enormous literature on breeding, first paper based and more recently interactive and web based. This literature reveals important ideas about the innate properties of people and animals, and how they are transmitted. It is often produced by amateurs and enthusiasts. As will become clear throughout the following chapters, racing professionals inhabit a tight-knit world in which practical experience trumps theoretical or abstract knowledge. Until the recent development of genetic-level research into performance, the Thoroughbred has been subjected to less attention from veterinary science than might be expected. Even among today's equine scientists, as the next chapter will reveal, folk ideas of heredity similar to those found in traditional breeding manuals remain extraordinarily powerful.

THE BACKGROUND TO THOROUGHBRED BREEDING THEORIES

Tracts about breeding racehorses either assume or assert the importance of the horse and its superiority to other animals. James Sanders, an American breeder,

writing in 1885, provides a typical example, saying, "It is stated in Holy Writ that 'God made man a little lower than the angels,' and by common consent the horse is voted next highest in the scale of created beings." As historian Keith Thomas has argued, horses are a "privileged species" in the social imagination of both the UK and the US. The status of the horse has been attributed to its association with freedom, status, and power, including military superiority based on the capacity to mobilize large armies. However, despite the insistence of enthusiasts that the Thoroughbred is the creature most worthy of human attention, other breeds and indeed other species—including cattle and dogs—have of course been subjects of selective breeding programs, though none of these has sustained the racehorse's prestige.[3]

Since the horse is removed from the more mundane responsibilities of its fellow domestic animals, it has proved more successful in carrying the cultural load of the elite. Though it is quite possible to ride a cow, the experience may be disappointing when compared to riding a horse. This potential led to what Barclay has described as the centaur complex, the sense of superiority achieved by riding on horseback, looking down on your pedestrian inferiors. In the UK, as well as in the former colonies, these associations have been partially preserved in the trappings of military display and tradition, despite the obvious obsolescence of the horse on the battlefield. The Trooping of the Colors that takes place in central London every June is a vivid reminder of the continuing association between the horse and the military, albeit in a ceremonial role.[4]

Of all horses, the racehorse is the most highly valued and celebrated, ahead of the hunter and the military charger, the only real competitors for top slot. He is freed from the relative drudgery that makes most other breeds and types unworthy of the gentleman's admiration, and as a result provokes praise and almost wonder, as from Englishman Thomas Morland, writing in 1810, when the Thoroughbred was in its infancy: "The Blood Horse, in grandeur and justness of proportion, surpasses all quadrupeds; neither ferocious nor carnivorous, he possesses the most engaging and admirable qualities: his noble spirit and native courage, attempered by his generous disposition and attachment to man, entitle him to our particular attention; as of all animals, he seems best calculated to become the servant and associate of man." The attribution of moral qualities to the "blood horse" continues today. The racehorse has no role other than sport and is often credited with a haughty disposition. He is not interested in the mundane things of this world. The emptiness of mind that might be inferred when a racehorse stares into the distance can be interpreted as intelligence or high-mindedness by those wanting to believe such things, usually the people who pay the vet and feed bills. "Ah," they tell me, "still waters run deep."[5]

In general, horses are more energetic than their bovine cousins and keener to

express the individuality that their owners are anxious to attribute to them. In this regard, racehorses are doubly blessed. Not only are they members of a species known for its sensitivity to the environment and for its flight mechanism, they are also kept in tiny stalls for twenty-three hours out of every twenty-four and fed a diet that is enormously high in energy. They are kept at peak fitness through short bursts of intense activity and then confined. They are transported all over the world in noisy trucks, trailers, and planes, and they have to perform in an environment, the racecourse, that could not be more alien to them: noisy, bustling, unpredictable. Under these trying circumstances, racehorses do remarkably well, and really the surprise is that it is possible to submit horses of any kind to this regime. However, they also regularly show their "wild side," rearing in the paddock, bolting on the training track, refusing to go into the stalls, and occasionally completely flipping out for no apparent reason. This potential for unpredictable behavior makes the racehorse dangerous, thrilling, apparently complex, and therefore compelling.

As a result of the unquestioned status of the racehorse, breeding manuals were considered a fit subject for gentlemen of the eighteenth century when the Thoroughbred was established. Members of the armed forces were likewise thought suitable sources of expertise in matters of horse breeding, owing to their experience in the field and in honor of the links between improvement of the Thoroughbred as a breed and the need for horses in the defense of the country. So, how do pedigrees work? Or, more precisely, how have Thoroughbred breeders imagined that they might work? There seem to be no limits to the degree of disagreement that can occur between breeders, even those who are operating at similar times and in close proximity to each other.

Thoroughbred breeding theories preserved the classical tradition that informed ordinary horse breeding. The two theories that were invoked in seventeenth-century investigations of heredity were those of the Hippocratic authors and of Aristotle. Of these, Aristotle was the most forthcoming about horses. Most importantly for the investigation of Thoroughbred breeding theories, Aristotle believed that while both male and female contributed to generation, via semen and menstrual blood respectively, their contribution was not equivalent. More specifically, the female's contribution is mundane or passive, and the male's creative or active. In its most stark formulation, "the semen of the male differs in that it contains a principle within itself of such a kind as to set up movements also in the embryo and to concoct thoroughly the ultimate nourishment, whereas the secretion of the female contains material alone." This asymmetrical theory supported patriarchal notions of descent among humans and is also one of the most enduring notions about Thoroughbred reproduction. Aristotle's vision is a kind of scientific totemism: his theory of animal repro-

duction reflects his own society's understanding of the "natural" relationship between male and female.[6]

According to Aristotle, the sex of the offspring depended upon the relative "heat" of the contributions, and a female offspring was the first departure from the ideal. Resemblance was firstly of the male parent, secondly of the mother, and then along either parental line, so that a child may resemble a grandmother or grandfather. Young or old parents were thought to produce more female offspring as a result of their lack of heat, or, as Aristotle wrote, "More females are produced by the young and by those verging on old age than by those in the prime of life; in the former the heat is not yet perfect, in the latter it is failing." However, Aristotle believed that stallions were immune to this deterioration, citing the example of a forty-year-old stallion still producing good strong foals even when lifted to cover his mares, an example which also illustrates the presence of human intervention in horse husbandry at the time.[7]

The *History of Animals* refers to two methods of producing horses—as part of a herd and within a private stable. In the latter case, where breeding can be staggered and controlled, Aristotle recommends a long break between pregnancies in order to ensure good quality foals. This period of rest would enable the mare to replenish her reserves and thus increase the chances of a good foal resulting from her next covering. The idea of replenishing reproductive energy came to be important in later breeding theories, affecting not just the treatment of the mare as breeding stock but also providing the justification for curtailing her racing career, lest she use up her reproductive energy on the racecourse. These ideas about energy and heat lead through the Italian breeder Federico Tesio in a direct line to present-day resistance among breeders to the use of artificial insemination (AI).[8]

For Aristotle, generation is explained by the coming together of the male creative element and the female nutritive element. If the age and condition of each horse is optimum, a male offspring, resembling its male parent, is produced. *History of Animals* certainly advocated selection, but the idea of "fitness" appears to have been limited to age and condition. The first mention of selection on the basis of phenotype appears in Varro's description of horse breeding in Greece in the first century A.D., which refers to a group of horses retained specifically for breeding purposes, saying, "As some horses are fitted for military service, others for hauling, others for breeding, and others for racing, all are not to be judged by the same standards." Varro also describes practices that suggest that intervention in animal reproduction was already commonplace at the time, including breeding in hand and gelding (castration of males). Varro wrote *On Agriculture* for his wife, who had purchased a farm,

and it reads as a practical manual, albeit couched in the dramatic form of the time. It is the practical foil to Aristotle's deductive style.[9]

A combination of Hippocratic and Aristotelian ideas dominated thinking about human generation until the seventeenth century when the anatomical investigations of William Harvey and others made these theories untenable. Harvey drew attention to the absence of any mixture of semen and menstrual blood in the uterus of fertilized females. In fact, he couldn't find any evidence of a male substance of any kind and so deduced the existence of a female primordium, the ovum, stating that "all that is alive comes from the egg." In an explanation that seems similar to that of Aristotle despite Harvey's disavowal of his theories, the ovum was somehow activated by the semen without any physical contact having taken place between the two. When faced with the still thorny problem of the production of the complex embryo from a seemingly simple substance, Harvey ran out of ideas, and he argued that the organs produced within the embryo were differentiated by God.[10]

In the 1660s and 1670s the microscope enabled a different kind of explanation to flourish, based on the observation of minute objects and processes. With the "discovery" of the egg and sperm, two different schools were created, the ovist and the spermist, each believing the potential embryo existed in preformed state in either the female or the male reproductive element. However, God was not removed from the scene but rather shuffled back somewhat further in the process. The implication of preformation was that there had been a single moment of creation during which all potential forms of life came into being. The effect of the theory is to leave animal breeders with no hope of positively influencing the outcome of animal reproduction since the die is, as it were, already cast. If anything, breeders must rail against degeneration, rather than strive for improvement. The difference between these two strategies is negligible in practical terms. However, as animals capable of expressing human aspirations, racehorses capable of improvement are much more attractive than those in a gradual and inevitable state of decline.[11]

The absorption of theories of generation by animal breeders was minimal until the seventeenth century, when texts became much more widely available because of changes in the production of print media and its distribution. However, the series of Tudor Acts concerning the breeding of horses referred to in the previous chapter clearly reflected the practical understanding that stature at least was, to some degree, inherited. Even though there was no readily available theory with which to explain such insights, legislation since 1535 had required horse breeders to cull small animals and allow breeding only between those above a particular height.[12]

THE EMERGENCE OF THE THOROUGHBRED

Aristotle's influence was preserved by the Italian equestrians who dominated the sixteenth-century world of horse breeding. Henry VIII was particularly keen to employ Italians in the royal household in order to draw on their superior knowledge of husbandry and of riding. As Thirsk has established, the major source of information concerning ideas about breeding at the time came from translations of Italian texts produced by Henry VIII's "Gentlemen Pensioners" (a group of forty men appointed to attend the king on state occasions). The most significant contributors included Thomas Blundeville, John Astley, Sir Nicholas Arnold, and Gervase Markham (the descendant of a gentleman pensioner). These ideas would survive until the eighteenth century, specifically until the creation of the General Stud Book in 1791.[13]

The Italian contingent was concerned with the production of manège, cavalry, and ceremonial horses. At this time, horses of all kinds were raced against each other. The theories of breeding that held sway under the influence of the Italians focused on the proper combinations of horses to provide the correct type of offspring for a limited number of specific functions, and on the management of these animals. Prominent Neapolitan equine authority Prospero d'Osma, commissioned to report on the state of the royal studs in 1576 by Elizabeth I, thought soil and grass of great importance, warned against over grazing, favored rotation and the provision of shelters for extremes of weather. He increased the rations at the royal studs and advocated that foals be allowed to stay with their dams for a year and a half, longer than had been customary. D'Osma notably warned against the crossing of horses of distinct breeds, a practice which, he wrote, resulted in the production of "bastard horses." Although each of the mares of the royal stud were named by d'Osma, no pedigrees were recorded, reflecting the view that it was not so much the crossing of breeds that was to be discouraged but rather that there were proper crosses and crosses to be avoided.[14]

In 1607, Gervase Markham, who is thought to have sold the Markham Arabian, the first recorded ancestor of the Thoroughbred, to King James I in 1616, advocated the crossing of Neopolitan, Sardinian, German, or French horses with English mares in order to produce war horses; Arab, Barbary, Spanish, or Greek horses for swiftness and endurance; Hungarian, Swedish, Polish, and Irish crosses for travel and war; and Flemish crosses for draught purposes. This advice reveals the extensive international resources available to breeders at the time. In detail, it contrasts with that of Thomas Blundeville, who, in 1560, had preferred to cross a Neopolitan stallion with a Flemish mare to produce the ideal war horse; however, the consistent

feature of such theories was a division between purebred breeding stock and utility crosses. This was not a license for indiscriminate crossing, rejected by both authors, since pure stock were returned to for their original properties. The choice of particular individuals for breeding depended upon a combination of considerations of age, condition, and phenotype.[15]

In addition to these factors, all of which are mentioned by d'Osma, Markham also encouraged breeders to consider ancestry, arguing that "a clown may beget a beautiful son, yet will he never beget an heroical spirit . . . his inward parts may retain a secret wildness of disposition, which may be insufferable in breeding." The possibility that the appearance, of a man or a horse, might misrepresent his true worth reappears throughout Thoroughbred breeding manuals. The idea suggests that the essence of a person or a horse is not necessarily manifest in his outward appearance, but that this essence will become obvious under pressure of competition or through reproduction. This essence is of course transmitted through proper unions and cannot be instilled through any other means. It cannot be trained into a horse, let alone a man. As such it is perhaps the most significant principle of all in determining the ability of racehorses to stand in for their owners.[16]

Markham's concern with ancestry gradually eclipsed the Italian preoccupation with correct crossing in a single generation, tractability, training, and environment. Markham's impulse had won through to the extent that a certain orthodoxy could be detected in the work of Nicholas Morgan, for example, who argued in 1620 that in the art of breeding horses "the first and principall foundation thereof consisteth in the election of stallions and mares, which are most fit and proper for that purpose, for the least carelessness therein is the utter ruine of all the whole work, since like engendring like, if any evil choice be made an evil product must remaine of the composition." By this time, the crisis facing English horses that had prompted the consultation of Italian experts had passed. In 1667, William Cavendish, Duke of Newcastle (who had spent the interregnum years in Europe and so had firsthand experience of these things) declared that English horses were of a very high standard, having been "bred out of the horses of all nations."[17]

Following the Restoration (1660–85), breeders began to concentrate on producing racehorses rather than horses for the mènage. They created a horse with a single function, the Thoroughbred. Under the influence of the Italians, elite horses had been produced by the crossing of imported stallions with native mares in the belief that the properties sought from the import could be transmitted only if it had been produced in the country or region in which the breed originated. Imported horses and their offspring were suited to long-distance racing. They were pushed out of their role in the breeding of the racehorse by the superior ability of crossbreeds in the

shorter-distance races that became increasingly popular, and by the historical coincidence that importing horses became prohibitively expensive. The change in emphasis from returning to imported sires to attempting to reproduce their qualities in native breds was most successfully enacted by the D'Arcy family based in Yorkshire. James D'Arcy was appointed master of the royal stud by Charles II on 6 June 1660, barely a week after his Restoration. James the elder ran the royal studs on behalf of the king, and his son, James the younger, ran his own successful stud at the Sedbury Estate near Richmond in Yorkshire.[18]

Despite the fact that Markham, Morgan, and others had argued for the importance of ancestry in the selection of mares and stallions for breeding, it seems that the recording of pedigrees was still extremely cursory at this point. Records of matings continued to focus on the type of horse rather than the individual, reflecting the established principle that the function of the horse determined the appropriate cross between types (see the various stud records collected by Prior, for example). The intention of the recording of pedigrees that began to take place in the eighteenth century, culminating in the General Stud Book in 1791, was to guard against "ringers," the practice of running older horses in races with age restrictions.

The explosion of weight-for-age handicaps that took place from 1750 onward created a temptation: to disguise older horses as youngsters so that they might carry a lighter weight during a race. Immature horses are notoriously difficult to age. Even when horses have adult teeth it is quite simple to change their appearance, as many horse buyers know to their cost. The GSB did not represent a desire to preserve the purity of the breed, and indeed the word *Thoroughbred* was not used in the early editions. Rather, it was a means of policing the increasingly profitable world of racing. The creation of this, the central text of the modern Thoroughbred breeder, made it possible to think about the breed in ways that were not intended by its originators but which were developed in the many breeding theories that the Thoroughbred prompted its custodians to bestow on the unsuspecting world.

THOROUGHBRED BREEDING MANUALS

The General Stud Book was created as a record of the ages of Thoroughbreds. An unintended effect was to record Thoroughbred pedigrees. On the basis of these records, it became possible to distinguish between different strategies for producing superior animals. This became an industry in itself. Breeders were interested in answering the following questions: How were past successes to be explained? How might they be repeated? What premium should be placed upon breeding? What were the relative influences of male and female parents? What other factors might

influence the quality of an offspring? The manner in which these questions were answered revealed not only their knowledge of the Thoroughbred but also their shifting understandings of class, race, and gender.

The extent to which Thoroughbreds benefit from inbreeding has been a perpetual concern. In 1825, for example, Hanckey Smith argued, "We should keep as much into good blood as possible, even incestuously, instead of exchanging it for that of inferior goodness and symmetry," even though Morland had observed in 1810 that "by mixing races, we obtain beauty of form, and every other valuable quality." Hanckey Smith and Morland were both published in London, within fifteen years of each other, and yet they propound what seem to be opposing theories. Hanckey Smith's preference for inbreeding is more representative of this time, when pedigrees reflected a degree of inbreeding at times incestuous according to the human template. William Allison supports Hanckey Smith by writing in 1901 that "it is only by excessive inbreeding that we can arrive at any certainty of type."[19]

The substance of heredity at this time was imagined as blood, and the aim of the inbreeding practiced by many was to "concentrate" this blood. For long periods before the twentieth century, the adage that one must "breed the best to the best" was pursued doggedly, without any recourse to the limitations of what would constitute incestuous human sexual relations. In particular, good female offspring were bred to their sires, since this provided the most potent means of doubling the representation of his blood in her offspring. In accordance with Aristotle's principles, the cross between a dam and her male offspring was undertaken less frequently. Coronation V, who won the Arc de Triomphe in 1949, was inbred to both Tourbillon and Teddy. In such cases inbreeding results in the progressive loss of numbers of ancestors in each generation, and Coronation V had three grandparents (instead of four), six great grandparents (instead of eight), and eleven great-great grandparents (instead of sixteen). Each theory attracted both champions and critics, but Lady Wentworth's opinion that "unnatural crosses should be taboo," voiced in 1951, perhaps marks the end of support for incestuous crosses.[20]

As well as the optimum limits of inbreeding, the relative influence of the mare and stallion in determining the outcome of any mating were also hotly debated. Hanckey Smith described himself as "disposed to attribute more in general to the dam than the sire," in direct contrast to Antwerp and Lamplighter, who argue that "mares are a necessary evil, only to serve as material to propagate the breed." This disagreement was not confined to England. In 1946 Colonel John F. Wall reported that while Madden, "one of America's master breeders," believed that the sire was the greatest factor in mating, "stating somewhere that the stallion dominates 75%," E. R. Bradley, "America's most successful breeder today . . . considers the mare 80%

in importance, the stallion 20% in influence." Regardless of whether a breeder favored the mare or stallion, scorn was heaped upon those who would hold the opposite view, as in, "The male occupies the strongest influence on external organization, but the contrary is the most prevalent view among the uninformed." Occasionally, erroneous views were attributed to whole nations. The American breeder Ridgeway believed that he had identified the "middle-way" between Arab and English mistakes: "As the Arab from his ancient practice of tracing his own pedigree through females is inclined to lay too great stress on descent through mares, so the English from their rooted belief in male descent have generally thought only of the stallions and have unfortunately paid too little heed to the mares."[21]

"Ovist" breeders, those who attributed more influence to the mare, including Bruce Lowe, William Allison, and the third Aga Khan, based their ideas on the observation that the egg was the larger of the reproductive components. In an echo of the ideas of Aristotle and Harvey, the sperm was the mere spark that prompted pregnancy. Ovist breeders are distinct from those who believe that mares should be the focus of greater attention than the stallion because they represent the weakness of the pedigree, relative to that of the male ancestors. These ideas are associated with the famous Italian breeder Federico Tesio, whose ideas are discussed in greater detail in the next chapter. Tesio believed that "the mare is like a sack which gives back what has been put into it . . . The female is by nature weaker. The purpose of her existence is the state of pregnancy. As soon as she becomes pregnant the nervous—almost neurotic—symptoms of virginity disappear." Though the quantitative contribution of both the sire and dam is equal according to this theory, the quality of that contribution is radically different. The idea is best expressed by the Aristotelian analogy of the mare as a piece of wood and the stallion as a carpenter. As William Brooks, the nineteenth-century biologists put it, echoing Aristotle, "The male element is the organizing and the female the perpetuating factor; the ovum is conservative, the male cell progressive." In nineteenth-century England this led to a division of labor between the sexes that allocated reproduction to women and public duty to men. These ideas remain influential among Thoroughbred breeders today. The manager of the stud I worked for in Newmarket referred to mares as "mobile incubators."[22]

It is also possible to combine both class and gender as explanatory frameworks. English breeder Henry Wynmalen, writing in 1950, argued that the better-bred parent will have the greatest influence over the offspring: "The equal potency of both parents applies only in so far as both are equally well bred, for if one or other of the parents is better bred than the other, the better bred one will be markedly pre-potent. Which is due, of course, to the accumulated influence of a flawless ancestry." This argument is related to a belief in "prepotency," the idea that some stallions, and the

occasional mare, are capable of exerting greater influence over their offspring than is normal. This belief is alive and well in the breeding sheds of the UK and the US, in the idea that a stallion can "stamp" his stock with his own likeness. William Allison, writing in 1901, and in contradiction to his generally ovist views, produces a variation of this argument, saying that "the superior parent produces the opposite sex." He maintains that it is a matter of common knowledge that "females are apt to take after their sires and males after their dams," an opinion that I haven't seen written anywhere else but have heard expressed in breeding sheds on both sides of the Atlantic.[23]

Some writers eschewed a discussion of the relative influence of the sexes or the better bred and concentrated instead upon the influence of different generations upon a foal. Theirs was a vertical examination of the pedigree. The work of Dr. Robertson and his followers credited the grandparents with the greatest influence over any offspring, while denying any influence whatsoever to the immediate parents. In 1906 Robertson wrote that "it may safely be asserted that no horse or mare ever reproduces exactly the same combinations of characters as are present in the somatic cells, hence the practical necessity of paying more regard to the four prospective grandparents than to the two individuals you intend to mate." By 1942, Robertson's follower, Keylock, is even more assertive: "Neither the sire nor the dam can convey *any* characteristics to their progeny and the progeny inherits *all* the characteristics from its four grandparents."[24]

In yet another addition to the corpus, several early-twentieth-century breeding manuals suggested that offspring could be influenced by factors beyond their own dam and sire. The idea of telegony, or saturation, held that the mare would retain some of the influence of each sire she was put to and could contribute any of these elements at random to a later foal, a process described as "throwing back." Major James Platt, writing in 1927, described the case of Blaze, "whose dam first got accidentally with a black cart horse. The dam, when mated again with a Thoroughbred sire produced a great racehorse in Blaze. Although it did not interfere with his racing capabilities, his outline and confirmation were totally different from the then prevailing race-horse. He was a hand higher and black in color, both of which peculiarities he undoubtedly owed to the black carthorse." This theory reveals anxieties about the pollution of the purebred females and has been applied to a number of different species: canine, equine, and human. As might be expected, it is an asymmetrical theory, in that the stallion will not suffer the same fate from sleeping around with carthorses from the wrong side of town. It also effects the ruin of entire dam lines since, according to Platt, "It is well known that females can throw back for hundreds of years."[25]

The idea of telegony survived well into the twentieth century in the form of

"breeding back." The theory was that a mare should be sent back to the stallion that covered her the previous season in order to get a double dose of his influence. The second foal should be superior. This method provided some spectacular results for Lord Derby, before being used to produce the sire of the most influential stallion of the second half of the twentieth century, Northern Dancer. Canadian breeder E. P. Taylor bought a broodmare in foal to Nearco (bred by Tesio) and, in accordance with his ideas about double doses, sent her back to him. The first offspring was the useless Empire Day; the second was Nearctic, champion Canadian two-year-old of 1956. Nearctic sired the legendary Northern Dancer on his first covering of Natalma. Arctic Dancer (1963), a full brother to Northern Dancer (1961), was nowhere near as good. Thus, as is often the case, the "breeding back" theory is both proved and disproved in one series of breeding maneuvers.

Regardless of their beliefs about the source of a foal's attributes, some breeders followed a practice that continues in a few breeding sheds today, that of leading the stallion around the mare after covering. Originally, this was so that she might fix his image in her mind and produce a foal as similar to him as possible. The practice complements the "mare as necessary evil" theory particularly well. When I asked about it in the breeding sheds I visited, I was told that it was sometimes done out of superstition, with no real idea of its significance; after all "it can't hurt."

As with all inexact arts, Thoroughbred breeding surrenders beautifully to divination and folklore. Lord Wavertree's tendency to base his horses' matings on astrological compatibility is well known and bore fantastic results. Wavertree bred the winners of seven English Classic races between 1905 and 1913, including One Thousand Guineas winner Witch Elm and Derby winner Minoru. In the breeding cabinet of the Keeneland library there is still a huge assortment of literature advising the breeder of the most favorable time in the lunar calendar for arranging the covering. In 1980, Nan Burket offered advice on "how to plant young'uns by the moon," while also offering invaluable rules for castration: "Castrations should be done while the moon is in Gemini, Virgo or Capricorn. DO NOT castrate while the moon, the sun or mars is in Scorpio." The presence of such literature alongside the usual Mendelian tracts struck me as the ultimate hedge bet by the custodians of the library. One might expect that this thinking would fade in the light of increasingly sophisticated veterinary knowledge; however, "The Sign," a series of astrological charts, is still produced in each edition of the *Blood-Horse*, the trade magazine for the Thoroughbred industry in the US. It is glossed as follows: "The Sign is a zodiacal tracking, by which some horsemen traditionally have determined the best time for weaning and certain other husbandry decisions." The maintenance of traditions such as "The Sign" reflects the continuing influence of astrological considerations on Thoroughbred breeding to-

day and their coexistence with equally fanciful notions of heredity based upon ideas that were dismissed by biomedicine centuries ago. Thoroughbred breeding is a flexible social practice that has successfully absorbed new insights while preserving core ideas about people and animals.[26]

HORSE BREEDING AND EUGENICS

The scientific totemism that had been initiated by Aristotle reached its apotheosis in the relationship between North American Thoroughbred breeders and the eugenics movement. The link between the selective breeding of particular animals, including the racehorse, and eugenics has often been made through analogy. The argument was that since breeders believed that horses should be selectively bred they must believe that humans should be also. This begs a host of questions. Most obviously, some breeders may maintain that horses are very different from humans, an argument that would find much credence among horse breeding outsiders. However, there are also examples within the literature in which this analogy is made by the breeder him or herself, and in which horses and humans are deliberately elided. Sometimes this explanatory burden has been reversed, and human examples are used to establish the apparently obvious truth that horses must be selectively bred in order to be suited to their particular role in life, as in the position of British Thoroughbred breeder Captain A. S. Campbell, who wrote that "a boy bred to ride, generally rides; a boy bred from a 'mechanical' father generally takes to mechanics; a sailor's son naturally goes to sea. Why should not horses be expected to act likewise?" Campbell justified his thesis on heredity in horses by looking at the example of Scottish herring splitters. These young women had traveled to East Anglia in the east of England in order to split herrings for generations. Campbell quotes with approval the head of the National Fish Trades Association, who told him, "It might be said that East Anglian folk might be trained to be gutters of fish and splitters of herring. It could not be done. It might perhaps be possible by the training of generations, but the first generation would make a sad business of it."[27]

The degree of consciousness with which arguments about horses are used to support arguments about people (or vice versa) varies considerably among individual breeders. However, the distinctive history of race in the United States determines that this matter will be of more immediate relevance to their breeders than to those of the UK. The most systematic application of Thoroughbred breeding theories to the problem of breeding good human stock can be found in W. E. Stokes's book *The Right to Be Well Born; or, Horse Breeding in Its Relation to Eugenics*, published in 1917. Stokes was the president of the Patchen Wilkes Stock Farm in Lexington,

where he bred mostly trotting horses. He argued that the "highly organized racehorse is more like the high-bred man in his physical and nervous constitution than any other animal" and therefore, "if the problem of producing great racehorses could be solved, much light could be thrown upon the question of human inheritance." Stokes outlined his belief in the primacy of hereditary factors in determining the worth of both horses and people in a chapter entitled "Some Races Are Backward." The group he demonized most is predictably that of African Americans, as well as schoolchildren in the city of New York: "The great per cent of the sub normals is alarming. Heredity is the cause and the sole cause." His ideas both fed into and reflected arguments about immigration that were taking place in the US at the time. Stokes described immigrants as "a mass of physical monstrosities" and echoed the opinion of Davenport that "the imbecile is an imbecile for the same reason that a blue-eyed person is blue-eyed."[28]

Stokes advocated an improvement in American stock through selective breeding (and more importantly, selective sterilization) and the creation of castes of workers (aristocrat, musician, laborer, etc.), all suited to their places in life and therefore blissfully happy, a revisiting of Plato's *Republic*. Stokes's recommendation that the human "unfit" be rendered impotent was based upon the castration of substandard colts: "We never try to render fit a sire by education . . . the same rule should apply to humans." He asked rhetorically, "Why do we not breed human beings to endure hard work and do it with ease, without straining, just as we breed the dray horse?" He envisaged families of jockeys "who will always be fit and ready to meet any racing requirements." The outcome of this division of labor would be that "the working girl will be able to look over the health certificate of her prospective husband and see in what class he belongs."[29]

In keeping with Thoroughbred breeders who preceded him, Stokes was against the mixing of breeds, or outcrossing. He tells an obscure story about cobblers in Chicago to support this position. According to Stokes, the rough frontiersmen of Chicago found themselves without suitable mates and so sent for "genteel women from the East and South of lost fortune." Stokes warns that crossing a dray with a racehorse will create a monstrosity, and that "such crosses are an outrage on both breeds." Thus he argues that the result of the cross between nouveau riche men and impoverished gentlewomen was bound to be flawed. In this case the product was women with ugly and unusually large feet: "The horse breeder of today can readily understand why the new City on the Lake then made such enormous demands for ladies shoes of the larger sizes." Stokes describes the ladies shoe and slipper manufacturers in the area as "driven to their wit's ends to design shoes and slippers to hide the large and ugly shaped feet of such offspring."[30]

As well as condemning the mixing of races of classes, Stokes also restated the Aristotelian idea that the stallion makes the more profound contribution to the outcome of any covering and applied it to the relative contributions made by the human father and mother, saying, "In some countries, chiefly polygamous, the offspring used to take the name of the mother until science proved it was the sire that stamped the child's mental and physical powers and gave it vigor and stamina." Elsewhere he wrote, "The female may be said to represent Mother Earth." The sources of these revelations are not referred to, and as is customary among Thoroughbred breeders, Stokes treated as self-evident one of the consistent but contested opinions of the Thoroughbred breeding community. The elision between human female parent, "mother," and male equine parent, "sire," was justified by his conviction that the analogy between high-bred humans and racehorses is seamless and thus required no further support. Stokes's praise for the German eugenics policy of the time is, in retrospect, tragic: "Germany has her scientists right here today, studying animal and human impregnation. She is a nation of scientists and she knows they have to impregnate or they, as a nation, are lost."[31]

North American breeders created financial as well as conceptual links with the eugenics movement. Mary Williamson Averell Harriman, for example, widow of breeder E. H. Harriman and mother of the second wife of American Jockey Club founder William Kissam Vanderbilt, donated the land at Cold Spring Harbor on the north shore of Long Island where the Eugenics Record Office (ERO) was built. Governor Leyland Stanford, owner of the Palo Alto Farm and the famous racehorse Electioneer, established eugenicist David Starr Jordan at the head of Stanford University. In 1934, Harry Laughlin, a high school teacher, selected by Charles Davenport as superintendent of the ERO, wrote *Racing Capacity in the Thoroughbred Horse*, which attempted to "discover the mathematical rules by which Nature transmits racing capacity from one generation of Thoroughbred horses to another." His research was funded by Walter Salmon, who bred racehorses on Mereworth Farm in Lexington, Kentucky. Between 1923 and 1932, Salmon contributed $75,762 to the Carnegie Institute for this purpose and unknown sums to Laughlin directly. The result was a theory that expressed racing capacity in the Thoroughbred as a formula: Psel. BH (2.5) = f(FI, BH). The sterilization laws proposed by Laughlin in 1913 were adopted by numerous states before forming the basis of Nazi Germany's 1933 sterilization laws.[32]

While the views of men like Charles Davenport and Harry Laughlin were gradually eroded by the progress made by alternative explanations of heredity within academia, it could be argued that the particular circumstances of Thoroughbred breeding allowed such views to flourish long after their scientific shelf life. The

symbiotic relationship between a privileged section of human society and the Thoroughbred has been documented both in the UK and the US. However, this relationship is far from static, or monolithic, or isolated from social and political processes occurring outside the world of horse racing. Rather, the relationship between horses and their breeders and between horsemen and horsewomen and the wider society is an expression of privilege in a particular place and time, and it reflects how that privilege might be perceived by outsiders as well as by other members of the set.[33]

Stokes wrote his book at a time when eugenics was thought by some to offer a dispassionate view of the world based on sound biological principles. Other North American breeders had struggled to reconcile the obvious clash between the founding principles of their nation with those of the Thoroughbred. James Sanders, for example, writing in 1885, assured his readers that he had no intention of undermining the principle that "all men are born free and equal," "which stands as the corner stone of our political system"—with the proviso that "there is a solid foundation, in physiological fact, for the admiration with which the 'first families of Virginia' have been regarded in some parts of our country, and the same may be said of many of the old families in New England and other parts of the country." The conflation of "physiological fact" with the preeminence of certain well-established families in Virginia and New England offers support to Sanders's treatise on horses. The contradiction between the Declaration of Independence and the philosophy of selective breeding as applied to the Thoroughbred racehorse or, for that matter, the human animal is left unresolved.[34]

This brief account of the evolution of ideas about breeding horses suggests that the dominant theories of each era reflected wider social and political realities. In order to test this thesis, the next chapter examines how Thoroughbred breeding theories have been reexamined in the light of more recent technologies, including at the level of genetics. It reveals that concerns about heredity, blood, and prepotency continue to preoccupy breeders today. The irony of contemporary breeding theories is that they retrospectively cast the Thoroughbred as the quintessentially selectively bred animal, when in fact the General Stud Book emerged not in order to record pedigrees for the purpose of selective breeding but in order to record age for the purpose of racing, an increasingly commercial enterprise at the time.

CHAPTER THREE

THE HORSEMAN MAKES THE HORSE

Thoroughbred breeders today are still concerned with sorting out the proposition of making good crosses. As I observed during my fieldwork in the stud farms and auction houses of Newmarket and Lexington, modern breeders, like many of their predecessors, are not always consistent in their application of theories regarding matings, buying yearlings, and assessing stallions and mares. If breeders manage to produce a good horse, they may well repeat the covering and justify doing so on a principle that in other cases will not determine how they breed, if for instance the principle has been seen not to hold for a particular mare. Breeders are like magpies; they are attracted to the successes enjoyed by particular theories in specific cases. They only infrequently seek to apply these principles in any systematic way. Furthermore, breeding theories that were devised when owner-breeders bred and raced their own stock must now be interpreted in the light of the overwhelming influence of the market for all kinds of bloodstock. Many mating decisions are based upon pragmatic considerations that reflect commercial and personal relationships between mare owners and stallion managers or their associates.[1]

Three guiding influences that breeders consistently referred to during my fieldwork were dosage theory, the figure system, and the work of Federico Tesio. Dosage theory attempts to predict ability based upon the analysis of superior male ancestors in a horse's pedigree and is used by gamblers and breeders to forecast the likely distance over which a horse will excel. The figure system identifies individual horses as members of particular families, or female lines, in a hierarchy where family number one is the most highly valued. Federico Tesio's theories concentrate upon the heat and energy of a particular cross between individuals and between particular

lines. These three theories respond to the most profound issues for Thoroughbred breeders: the relative influence of male and female, the relationship between earlier and later generations, and the source of racing ability and how it is transmitted.

In keeping with the practical orientation of Thoroughbred producers, these theories gained influence through their association with famous and successful individuals. Dosage theory was adopted by the third Aga Khan when he hit a purple patch of breeding winners in the 1930s. It enjoyed a renaissance as a gambling system in the *Bloodlines* column of the *Daily Racing Form* in the 1980s. Bruce Lowe's figure system was devised at the end of the nineteenth century, popularized by William Allison in 1901, refined by Kazimierz Bobinsky in *Family Tables of Racehorses* in 1953, and updated again in 1990 by Toro Sharai. The figure system was used with some success by James Ben Ali Haggin, Lord Wavertree, and August Belmont II, all large-scale, influential breeders of the twentieth century. It also spread throughout the industry via studbooks and sales catalogs that were annotated with family numbers for a period that lasted until the 1960s in the UK and the 1970s in the US. Italian Federico Tesio, who was a hugely successful breeder and trainer in the early twentieth century, related the quality of an offspring to the energy of an individual or line, a kind of alchemy that recalls Aristotle's preoccupation with the superior energy of the parent producing the perfect offspring. The success Tesio enjoyed in the European Classics with relatively cheap stock earned him the title of the "Wizard of Dormello." He bred twenty-two winners of the Italian Derby, including the influential Nearco (sire of Nasrullah), who was undefeated in fourteen races and won the Italian Derby in 1938.

Elements of all three theories can be seen at work in the decisions made by breeders at the present time. The aspects that have been retained respond to the changing nature of the industry and the market for bloodstock. As the great bloodstock analyst Charles Leicester argued, theories that gain an influence will become self-fulfilling evidence of their own success, as breeders producing for the market take them into account in their plans and the market is saturated with animals that are well bred according to those theories. As will become clear, the theories preserve the eugenic ideas that were contained in the breeding theories of the past, and even DNA-level discoveries can be accommodated with little or no adjustment to existing orthodoxies.[2]

DOSAGE

In 1902, Frenchman Lieutenant Colonel J. J. Vuillier examined the pedigrees of particularly successful racehorses to the twelfth generation. He noted that they

shared certain similarities and that fifteen stallions and one mare appeared in all of them with roughly the same frequency. He nominated these fifteen as *chefs-de-race*. By calculating the relative importance of each of these in the pedigrees of the talented horses he had studied, Vuillier devised what came to be seen as a sort of ideal recipe for a racehorse. Take one part Hermit, two parts of St. Simon, and so on. He then set about devising matings that reproduced this ideal recipe. So, a mare with a relative lack of one ancestor in its pedigree was to be mated to a horse with a relative preponderance of that ancestor in order that the correct "dosage" is produced in the foal. Though some breeders who followed this theory in the early to mid-twentieth century did not calculate dosage as such, they certainly engaged with the notion that stallions might breed into their mares a particular quality. Bend Or was thought to contribute size, Isonomy classic ability, and St. Simon prepotency and brilliance, for example.[3]

Vuillier drew heavily on the work of Francis Galton, who had exchanged ideas with Thoroughbred breeders. In an 1898 piece written for *Nature*, for example, Galton referred to "a useful diagram developed by Mr. A. J. Meston and communicated by him to the *Horseman* . . . the leading American newspaper on horse breeding." The diagram is a graphic illustration of Galton's law that "the two parents between them, contribute on the average one half of each inherited faculty, each of them contributing one quarter of it. The four grandparents contribute one quarter of it." This law formed the basis of the dosage system of breeding racehorses. The foal represents a blend of hereditary material, envisaged most often as blood. The nature of this substance and the traits it manifests in the offspring are determined by a cumulative calculation based on the qualities of the ancestors of that offspring, relative to their genealogical distance from it. This kind of thinking about relatedness brings with it highly specific ideas concerning the nature of inheritance, the passage of time, and the substance of heredity. It favors nature over nurture as the prime determinant of a racehorse's (or person's) future. As Galton stated in the Huxley Memorial Lecture of 1901, anticipating the connection that was to be made later by Stokes, "Men differ as much as dogs in inborn dispositions and faculties."[4]

Unlike many of the theories considered in the previous chapter, dosage completely disregards physical appearance, age, condition, the act of coition, the timing of conception, and the position of the sun and moon. It became incredibly popular, partly for reasons that apply to every breeding theory that has ever found momentary popularity. Every theory will produce some winners and some losers, as will an absence of theory. Most importantly, dosage preserved the spirit of "breeding the best to the best" and so felt familiar to breeders. The most convincing theories offer an explanatory mechanism powerful enough to focus the attention on winners rather

than losers, and the basis of dosage in past champions was compelling. Dosage appeared to constitute a mathematical formula capable of expressing the common-sense notion that many breeders already adhered to, the idea that the talent of the present generation was derived from their relationship with the past. Unfortunately, dosage proved a failure in just this sense. It described what had already taken place, but it was unable to predict the future.

Vuillier's work inspired the Italian Franco Varola. Varola had pretensions to much more than mere breeding theories. He considered himself to be an ethologist, and he argued that "ethology itself should begin from the study of the Thoroughbred, because this is the animal which provides the oldest complete physical as well as functional files, yet, the opposite situation is true, that is, ethologists study practically all existing animals except the Thoroughbred." The primary aim of the earliest of his most important works to have been translated into English, *Typology of the Racehorse* (1974), was to continue Vuillier's series into the twentieth century, so that pedigree research might be made easier. Varola was conscious of the burgeoning internationalism of the breed, in particular the growth of the breed in the US, where breeders were less well served by an increasingly distant series of *chefs-de-race*. He also introduced two changes to dosage calculations. First, he concentrated upon the achievements of the produce of any sire, rather than the achievements of the sire itself. In other words, he distinguished between breeding and racing ability. Second, rather than giving each horse a figure by which the dosage of his offspring might be calculated, he categorized his chosen *chefs-de-race* into bounded aptitudinal groups: transbrilliant, pure brilliant, intermediate, classic, stout solid, stout rough, and professional. These represent a hierarchical classification of the quality of each stallion's offspring.[5]

Varola thought that it was misleading to identify the best horses of each generation and then say that every pedigree should aim for greater representation of these individuals. Instead he looked for balance between three factors: speed and the ability to carry that speed over distance, the moral qualities necessary to participate in the fight for victory, and the ability to transmit desirable traits. He created a much longer list of *chefs-de-race* than Vuillier, on the basis that the aim of the Thoroughbred breeder should be to produce a pedigree that reflects a balance between each of these qualities.[6]

Prepotency is at the center of dosage theory, since this is the means by which the *chefs-de-race* were chosen. As Varola wrote, *chef-de-race* are simply "those sires who had transmitted such prepotent and unmistakable traits that any study of pedigrees would be meaningless without them." Although both Vuillier and Varola based their theories on prepotency, their understanding of this concept is radically different.

Whereas for Vuillier particular sires were literally capable of contributing more to a foal than their less influential mates, or fellow stallions, for Varola this was (most of the time) impossible, and his was a *functional* prepotency. He was "concerned with typology in a functional sense, and not with percentage of influence in a genetic sense," and he explained that "for this reason I do not regard even the conventional founding fathers of the present day Thoroughbred as too remote to be studied in the way of influences." This radical diversion from the original spirit of dosage theory has often gone unnoticed. It turns a breeding theory into a social theory. This insight has been lost, partly because Varola applied it inconsistently, continually switching between typological prepotency as a sociological trait and prepotency as a biogenetic reality, and partly because breeders don't need social theories; they need results (or at least ad hoc explanations for outcomes).[7]

Varola's functional typology enabled him to characterize individual Thoroughbreds as exemplifying one or other type and then to relate the dominance of any type, or pattern of types, to the existing socioeconomic context that produced the breed at that time. He characterized the Thoroughbred as having passed through three major phases. Before the First World War the breed had a feudal structure; until the Second World War, it had a corporative structure; after the Second World War it entered a new phase described by Varola as "international." His work is thus a mixture of calculations of various relationships between racehorses according to the classical premises of dosage theory and suggestive generalizations about the society that produced a particular kind of horse. The former was taken up eagerly by breeders; the latter was completely ignored.[8]

DOSAGE TODAY

I arrived for my first Kentucky Derby clutching the *Louisville Courier Journal*, confident that the predictions of racing journalist Rick Cushing would guarantee a profitable afternoon. I had been in Kentucky for some time, and my adopted group of expert punters had instructed me in the basics of their favorite handicapping system: dosage. Bob, in particular, was aghast that in all my time on racecourses in the UK I had remained entirely ignorant of dosage profiles, centers of distribution, and the like, and he asked, "Where you been, girl?" None of them would consider betting on a horse until they had examined its dosage figures and made what were at first mysterious calculations on the back of an envelope. To me, it was incredible to imagine that they were happy to bet on a horse without having first seen it in the paddock. As Bob told me, pulling me back into the grandstand, "You can't see what's under the hood from the outside."

During the 1980s, Leon Rasmussen, writing in the *Bloodlines* column of the *Daily Racing Form*, transformed dosage from an obscure breeding theory to a complex handicapping tool. In doing so he changed its potential audience from that of a tiny group of people who generally rely on their own experiences to make decisions about breeding racehorses to a vast group of people who are passionately interested in getting an edge, whether this comes from a manual, a telephone tipping line, or a nod and a wink from a connection. In *Bloodlines*, Rasmussen combined the insights of Varola and Vuillier to offer what he considered to be a statistical representation of the influence of certain ancestors on a horse's ability. Texan industrial chemist Steve Roman continued this work, changing the aptitudinal categories to reflect the handicapper's concern with speed over certain distances. He assigned his chosen *chefs-de-race* to categories of Brilliant, Intermediate, Classic, Solid, or Professional. Brilliant reflected a preponderance of speed, Professional a preponderance of stamina.[9]

According to Roman, the dosage profile is "a series of five numbers that reflect the relative proportions of each of the five aptitudes." It is calculated by collating the *chef-de-race* in a four-generation pedigree and recording the aptitudinal values (assigned by Roman). Aptitudinal values are increasingly weighted with generational proximity, so that the first generation exerts the most influence over the horse, the fourth generation the least. The dosage index (DI) is the number that is "directly proportional to the prepotent speed in a pedigree and inversely proportional to the stamina." A DI of 1.00 represents an exactly equal balance between the two influences of speed and stamina. Indices above 1.00 reflect a bias toward speed; those below 1.00 indicate a bias toward endurance or stamina. Roman also calculates the center of distribution (CD), the point along the scale "corresponding to the total combined influences of all chefs in the pedigree." A CD of zero reflects an equal balance between speed and stamina, below zero represents a preponderance of speed over stamina, above zero the reverse.[10]

In Kentucky, both breeders and gamblers enjoyed calculating dosages. Pencils and paper flew around the barn and the racetrack before each race. Some people developed their own systems, combining lucky numbers with dosage calculations. Bob was particularly keen on the number six and multiples thereof. As with all the systems adopted by my fellow gamblers, my counterexamples were ignored or reinterpreted in the light of exceptional factors that did not require wholesale rejection of the theory itself. Like the anthropologist Evans Pritchard, working on the oracle used to explain misfortune by the Azande in Sudan in the 1930s, I gave up arguing about alternative explanations and found that the system provided a comfortable set of principles according to which I could conduct my gambling life. Dosage suggests that the essence of a particular horse might be quantified, much as a chemist might

want to quantify and predict the outcome of a reaction between a group of substances with various properties. But what do they enable a handicapper or breeder to do? Will they tell breeders who to send their mares to? Will they tell a handicapper which horse is going to win the Kentucky Derby? Setting aside the short and obvious answer to these questions, it is worth comparing the context of the reinvigoration of dosage theory in the US with its relative obscurity in the UK and the rest of Europe.[11]

Dosage calculations are common in tipping sheets, private studbooks, sales catalogs, and form books in the US, where people involved in the breeding and handicapping business talk comfortably about its central principles and calculations. In the UK, racing professionals refer to what are in practice similar concepts (stamina indexes, for example), but they are scathing about the theory called "dosage." As with later examples of reluctant uptake of different forms of technology in racing in the UK, my sense is that this stems partly from a resistance to the idea that someone who is not a racing insider can accurately assess a horse's potential. The idea that an objective calculation holds the key to understanding the nature of a horse is wholly unacceptable to this group. UK racing professionals are reluctant to embrace this mechanical version of the racehorse at the expense of their understanding of such qualities as "heart," "class," and "quality," and of their inherent ability to detect such qualities.

The influence of dosage theory in the US can be traced to the success of the *Bloodlines* column. Prior to the 1984 Kentucky Derby, *Bloodlines* (jointly written by Rasmussen and Roman) successfully predicted that the winner would have a DI of four or under and be rated within ten pounds of the highest weight in the Experimental Free Handicap (EFH). The EFH is compiled by a small panel of experts for a hypothetical race over one and one-sixteenth miles on dirt. Colts and fillies are weighted separately. It enables comparisons between the most promising two-year-olds, despite the fact that most of them will not have raced against each other. The *Bloodlines* prediction proved to be correct, and since that time the calculation of dosages by those buying or betting on horses has been commonplace in the US.[12]

The record of the dual-qualifier system based on the measures put forward by Roman and Rasmussen was unimpeachable for some time. Between 1972 and 1987, the Kentucky Derby winners were all dual qualifiers. However, between 1988 and 2002, there were five dual qualifiers among the fifteen winners. In other words, the dual-qualifier system failed in ten of the last fifteen years before 2002. In 1998, when Real Quiet won the Derby it was said that the system had experienced its "Waterloo." Real Quiet had a DI of 5.29 and was eleven pounds below the top weight in the EFH, Favorite Trick. However, the fact that there were no dual qualifiers in the race suggests that this may have been an exceptional year. Favorite Trick was so superior

to his peers that only seven of them got within ten pounds of him in the experimental free handicap. Of these seven, four were dual qualifiers, none of whom made it to the Derby.[13]

The first of the principles of the dual-qualifier system requires that the horse show ability and precociousness at two. This is reflected in the horse's weight in the EFH. In the golden years of the system, between 1971 and 1978, when each of the eight winners of the Derby were qualifiers, six of the eight were top weights in the EFH. The panel of experts assigning the weights felt that they were the best horses of their generation on the basis of their achievements on the racecourse thus far. Honest Pleasure, top weight in 1975, was second in the Derby in 1976, while Protagonist, top weight in 1973, failed to start in 1974. I would suggest that the EFH alone has a far superior predictive value in this time period. The top weight in the EFH won on six out of eight occasions; on the other two the top weight either didn't run or came second. The dual-qualifier system is, in this case, a less accurate means of predicting the winner of the Derby, since it qualifies a number of horses for consideration without telling the handicapper which of them will win. The relationship between the winner of the Derby and the top weight in the EFH between 1972 and 1979 is direct. This reflects the ability of the panel of experts who created these rankings as well as the absence of outside factors that might lead to the best two-year-old of any year not winning the most important race of its three-year-old season. The dual-qualifier system is something of a distraction.[14]

The annual predictions contained in Rick Cushing's pre-Derby column in the *Louisville Courier Journal* are particularly revealing to the student of pedigrees and even more so to the student of pedigree experts. "It's unanimous for first time: Point Given is bred to win," the classic headline of 2001, which I relied upon to guide me through my first Kentucky Derby, contains two of the most important features of the pedigree expert world. First, pedigree experts rarely agree. Second, even when they do agree, they are often wrong. Monarchos won the 2001 Derby, and the unanimous choice of the experts, Point Given, could only manage fifth. Rather confusingly for a dosage enthusiast, Rasmussen picked Point Given and Congaree, both trained by Bob Baffert, on the grounds that "the only way to bet is Baffert 1–2." Perhaps this marked the conversion of Rasmussen, who is now in his late eighties, from pedigree to form, in which case dosage in its most recent guise has run its course within the space of a single lifetime. Despite this, dosage remains a popular handicapping tool, and it is also one of the resources that might be called upon by a mare owner before a stallion is chosen. Producing a horse with a dosage index greater than four is risky in the current environment of the US, partly because dosage diehards may consider it incapable of winning the Kentucky Derby, but primarily because the relative pre-

ponderance of stamina in the pedigree that this calculation represents is likely to be unpopular in the marketplace where the emphasis is upon speed.[15]

Dosage is based entirely on an analysis of superior individuals in the male line. The calculations make no mention of the mares that produced each of the *chefs-de-race*, nor of those stallions that were considered unworthy of this status. Dosage supports Antwerp and Lamplighter's statement made in the late nineteenth century that mares "serve as material to propagate the breed . . . They are only the sisters of their brothers and the daughters of their sires." As we have seen, there have always been dissenting voices within the Thoroughbred world which reject this view and emphasize the importance of the family, or female, line. Recently, several works have bemoaned the relative scarcity of information about taproot mares, or "blue hens," and have produced historical material that addresses this imbalance.[16]

In a remarkable turnaround, Rasmussen has moved away from dosage to advocate a particular form of "inbreeding to superior mares." He has replaced the dual-qualifier theory with the Rasmussen Factor (RF). Horses that are inbred twice within the past five generations to the same foundation mare, ideally through different individuals, are said to possess the RF. Fellow pedigree expert Ellen Parker has addressed the absence of the female line in dosage calculations by producing the *reines-de-course* series, which lists more than four hundred mares. However, the *reines-de-course* series appears to be as much a plea to attend to the female line as it is an argument that the female line is as influential as the male. Though influence is referred to, the more important lesson of *reines-de-course* appears to be the relative overrepresentation of stallions in the breeding literature. Parker argues that "perhaps the most important reason that the series has gained fans and earned acceptance is that until recently, there was a total dearth of published material on great broodmares." This sentiment reduces the importance of the *reine-de-course* to that of a curiosity, while a weak argument, that "one often hears a horseman say that a young horse has promise because he comes from a good family," is made in support of the importance of the consideration of the female side of any pedigree. I prefer the more rousing endorsement of Margaret Bayliss that "from immemorial time horsemen have had a saying, 'The mare makes the horse.' "[17]

THE FIGURE SYSTEM

In discussions of the relative contribution of the mare to its offspring I heard several breeders refer to the figure system of Bruce Lowe, popularized by William Allison in 1901. In the latter half of the nineteenth century, Australian Bruce Lowe spent years tracing every mare appearing in the General Stud Book back to her

"taproot" in the original edition. He then gave numbers to each of these families, ranging from one to forty-three, with family number one tracing to the mare who appeared most often in the pedigrees of the winners of the Derby, St. Leger and Oaks. Families one to five were designated "running families," while three, eight, eleven, twelve, and fourteen were "sire families." According to this system, the most favorable matings were between members of low-numbered families. Lowe died before he could publish his work, and Allison completed the task.[18]

Supporters of the system pointed out the success of low-numbered families or horses inbred to them, while detractors pointed to the overrepresentation of such crosses in the breed. In 1957, the bloodstock analyst Charles Leicester argued that the coincidence of anti-gaming laws in the US with support for the figure system had been almost catastrophic for the American Thoroughbred. Family numbers of particular mares are still referred to by breeders, at least they might be referred to if they are favorable. However, the relative overrepresentation of the lower-numbered families has reduced the value of such references to any buyer except the least experienced. Many studbooks and sales catalogs used to reproduce family numbers, though they have faded recently. The Australian studbook continues to assign family number to individuals. Although born in the UK, Bruce Lowe undertook his research in Australia, and died there.[19]

The most devastating criticism of the figure system came from the gambling maestro Phil Bull in a letter to *Sporting Life* in which he described the system as "a piece of arrant nonsense which has bamboozled breeders and has encumbered racing literature ever since." Phil Bull was a mathematics teacher and successful gambler who founded Timeform (a service providing data and analysis to gamblers) in 1948. He was also a successful owner of racehorses and made his fiery presence felt on several of the councils that monitored the conduct of racing in the UK. He was a scathing critic of many things, including the Jockey Club and especially the figure system, which he decided to debunk. Bull employed a researcher, Mr. Whitford, to collect the names of 500 really bad racehorses. Whitford came up with 430 horses, "each of which ran last in a selling race on at least one occasion in 1938 or 1939." Selling races, or "plates," were races of the lowest quality with the lowest prize money at the time. Mr. H. Mansfield of *Sporting Life* then identified the Bruce Lowe family numbers of each of the horses. Of the 430 horses, 46 were untraceable. The remaining 379 Bull put in a table called "Bruce Lowe Families of Worthless Platers," which showed that the largest number of worthless platers (43) were members of family number one, with the second largest number (38) being members of family number two. Bull makes no attempt to disguise his glee at the outcome of his experiment, in particular the fact that "the prize specimen, a horse by the name of Stanford, belongs

to the No. 1 family! He finished at the end of a selling race field not once but four times (though he is counted only once in the forty-three bad animals descended from this notable taproot)!" Bull's experiment reflects the overrepresentation of low-numbered families in the Thoroughbred population, which undermines any argument regarding their relative virtues.[20]

Lowe's theories have recently attracted the attention of geneticists at Trinity College, Dublin. In work financed by Sheik Maktoum al Maktoum's Gainsborough Stud, Hill et al. acknowledge the work of Lowe and the continuing significance of his figure system to the bloodstock industry, where "today, family assignment is often considered an important indicator of genetic value within the multibillion-dollar thoroughbred industry. Also, specific mating combinations between families are sometimes considered more or less auspicious than others." Note the cautious tones of the geneticists writing about the social practice of breeding Thoroughbreds, as they use the word "auspicious" to refer to certain breeding decisions. By using DNA to trace female lines through existing representatives of various families, this team was able to establish that the majority of families studied had flaws in their recorded pedigrees. When breeding between each of these families is taken into account, it seems that almost all pedigrees contain flaws as a result of these early errors. While Bull attacked the application of the figure system in practice, Hill et al. have raised questions as to the accuracy of the data with regard to the numbers attributed to particular families. The presence of past inaccuracies does not prevent them from relating their research to future "multimillion dollar decisions . . . based on the integrity of the pedigrees they record."[21]

The bloodstock journalist Tony Morris captured the paradoxical quality of this research in a piece for the *Racing Post*, the racing newspaper that is published daily in the UK. He began with what he referred to as a "startling conclusion," that "there is probably no thoroughbred in the world today whose recorded pedigree is 100% accurate." He continued by saying, "There can be no doubt that most practical breeders, who have every reason for confidence in the integrity of modern stud book records, will carry on regardless of today's revelations." Why? Because "performance is all the proof of pedigree they require." Hill concludes that more, and more accurate, pedigree research is needed. However, as Morris indicates, this data cannot be analyzed in isolation from the attitudes of the people who use it. Pedigrees have powerful magical and prophetic properties that exert an influence over breeders and therefore the breed itself.[22]

The reinterpretation of the figure system by amateur geneticist Marianne Haun has had a considerable impact upon how young racehorses are assessed, particularly in the US. Haun describes the "X-factor" as a gene for large hearts that originated

with Eclipse and is only transferable in the female line. She has argued that it is the daughters of the mighty who pass on greatness, rather than their sons. This is a remarkable development in breeding theories, as it combines traditional pedigree analysis with a version of genetics. The idea of the sex-linked large heart gene was dismissed in the strongest terms by my UK informants, who told me that it was "typically American" and the product of the "American obsession with women's rights and genes." The X-factor has had a considerable impact in the US, though less through pedigree analysis than through the increased popularity of "heart score" as an indicator of future ability in young racehorses. Australian veterinarian James Steel was the first to measure the heart scores of racehorses in the 1950s, using an electrocardiogram. Fred Fregin, a veterinarian associated with Haun, has continued this work and calculated that while heart scores may change between the first and third years of a horse's life, they are 23 percent accurate in predicting superior ability. This observation has been rather more influential than the X-factor, and it builds upon intuitions about the hearts of great horses that have increased the use of biometrics by the racing industry.[23]

Those who believe that a large heart contributes to performance estimate that the predictive value of heart "scores" (measurements of size and efficiency) is limited by the weaknesses of the container in which the heart is to be found. In other words, possession of a large heart does not necessarily mean that a horse will be physically capable of exploiting this advantage, or that it will necessarily be temperamentally disposed to do so. Despite this, yearling buyers have begun to measure heart scores, and as a result farms have been obliged to follow suit, measuring their yearlings before the sales. Some Kentucky-based companies (Equix Biomechanics and Cecil Seamen, for example) have combined heart score with pedigree, conformation, and motion analysis in an attempt to give a more accurate prediction of the horse's ability. The Equix Biomechanics website likens the horse to a "running machine," similar to a car, claiming that, "Since 1984, EQUIX has helped hundreds of owners, breeders, trainers, and investors achieve their goals by providing the tools and insight to recognize what is really 'under the hood.' "[24]

Although these companies seem to be flourishing, and one of their senior managers assured me that they were the future of the horse market, they are treated with utter scorn by some of the more traditional horsemen and horsewomen whom I encountered during fieldwork in Kentucky. As one breeder told me during a discussion of this topic, " 'You want to measure a horse? That's fine. What I don't like is that you get to a point where we all have to measure now. We all have that guy with the tape and the machines come around the farm, or his little girl. We have to because it looks like you got something to hide from the one guy (at the sale) who's gonna ask

you if they've been measured. I want to say to him, 'You got eyes! What more do you need?' " Another was even more outspoken about the possible value of heart scores and motion analysis and emphasized the skill involved in looking at horses, "It's a racket. Some people swear by it. But I think it's just a diversion. Because they can't see for themselves. What are you measuring, that's what you have to ask. If there was just one way of being a good horse then this whole thing would be simple. Even if it was like they said and different horses suited particular conditions then that would be something. As far as I'm concerned it just doesn't work out like that. I don't let them on the place if I can help it." This breeder contrasts the mechanical act of measuring with the embodied practice of "seeing." Measuring is disembodied and replicable, but according to these breeders, it tells you nothing important about the horse. "Seeing" is a skill that is impossible to abstract from the individual. It is therefore, among other things, heritable. As chapter 6 will explain, according to my informants, biometrics can tell you something about a horse, but it can't tell you everything.

FEDERICO TESIO

Yearling buyers who use biometrics focus upon the individual and its physical composition in a way that more traditional breeders find unseemly. Those who reject biometrics may do so on the basis that they are more interested in the long term and in the properties of a horse in relation to a particular breeding line, referring to the work of Federico Tesio. Tesio's theories were based on the idea that "all life is based on the consumption of energy to gain supremacy and on rest to restore that energy. In the rivalry for the selection of racing stock no thoroughbred family can hold the supremacy of success for more than a small number of generations in direct line." According to this argument, entire breeding lines build up energy, only to peak and then regress, in need of rest in order to regain their energy. Specifically, Tesio felt that success could only be maintained for three generations, based on his "law of maximum attainment" and the observation that if it were not for this law one could end up with "peas as big as pumpkins and pumpkins as small as peas." In practice, this theory resulted in Tesio's breeding (with some success) to stock that were deemed by him to be on the up, rather than to stock that he felt had already peaked. He was celebrated for producing champions from what seemed modest individuals. His ideas mitigate against the oldest of all breeding theories that one must "breed the best to the best," although they preserve the idea that "blood will tell." His theory was fitted to his own racing strategy, that of breeding and training his own horses, but it is less suited to the present time, when commercial pressures dictate that mare owners are attracted to established stallions. Modern

breeders do, however, make use of Tesio's ideas of heat and of energy, especially in their resistance to overbreeding and to artificial insemination. In his writing about fertility and heredity, Tesio is the intellectual descendant of Aristotle.[25]

Although Tesio wrote generally about his beliefs concerning the correct management of Thoroughbred stock and specifically about the principles of generation, he kept his breeding principles secret. These were deduced from his stud records by New Zealander Harold Hampton. Line breeding as practiced by Tesio and formalized by Hampton has proved very popular and forms the basis of Jack Glengarry's popular internet pedigree tool TesioPower. On a micro level, the age and condition of both mare and stallion was as important to Tesio as it had been to Aristotle. His explanation for untalented offspring produced by successful race mares was that "they have expended so much of their nervous energy in their races that they have little left to pass on to their progeny." Similarly, Tesio believed that stallions that raced until the age of six should be rested before they began their breeding careers. The physical qualities of the offspring of any union would be a reflection of the careers of dam and sire: their combined energy would be expressed in the foal. Thus, and in complete contrast to the majority of breeding theories, according to which long-distance runners would produce other long-distance runners, "Big distance runners come from horses who either have never raced at all, or have raced seldom or over short distances." Some breeders continue to engage with this idea, and it was often invoked in order to account for the talented offspring of an unraced mare. As one English bloodstock agent told me, "A mare that hasn't run might have had problems because her mother ran too much. The line has a chance to recuperate and out pops a champion. It's common sense."[26]

Tesio's ideas contradict the conventional attraction to individuals with proven race records and to breeding lines with successful production histories. In theory, his ideal covering would be between two unraced individuals from a less than top-class family. In practice he tended to cross quality with stamina. At the level of the individual covering, the energy transferred at coition became hugely significant, and this formed the basis of Tesio's resistance to artificial insemination (AI), which he felt led to a "lowering of nervous potentiality in the offspring," as well as being immoral on the grounds that, "to apply to animals the reproductive method of plant life is to lower them a step in the biological scale and to commit an act against nature." This is a sentiment that finds support among breeders today, one of whom told me, "Using AI on Thoroughbreds is like asking them to pull a cart. It's undignified. You can't use a syringe to reproduce that moment when a foal is created. It's not right."[27]

According to Tesio, Thoroughbred reproduction involved the transfer of energy from the stallion to the mare, and so the quality of the covering was a major factor

determining the quality of the foal. Breeders in Newmarket were avid supporters of the importance of the transfer of energy during sex, particularly when they were explaining their continued resistance to AI. AI is currently banned under the international rules of racing, which state that "a horse is not qualified to be entered for start in any race unless it and its sire and dam are each the produce of a natural service or covering, and unless a natural gestation took place in and the delivery was from, the body of the mare in which the horse was conceived." The ban on AI also limits the impact of genetic technology on the breed. Equine Genetics Research, a partnership between the Animal Health Trust in Newmarket and the British Horseracing Board (BHB), was formed in 2002. Project leader Dr. Matthew Binns is enthusiastic about the Thoroughbred as a specimen population. "Pedigree is genetics," he says, "so plainly it was a great project for research." But he is realistic about the possibility of isolating performance genes: "There is no speed gene." Twink Allen, who has recently been given permission to clone the first horses in the UK and is head of the Equine Fertility Unit, also based in Newmarket, is less circumspect: "If the map can tell you, 'Boy that mare's got some bloody good speed genes,' you say, 'OK, let's make sure we fix it into the family.' " The idea of a single "speed gene" was widely held by my informants, who told me that it enabled a faster breakdown of lactic acid. When I asked how they would know if a horse had the gene, one informant told me that all Thoroughbreds possessed it, and it was simply dormant in slow horses: "You just have to hope that it comes out in your own. Nothing you can do about it. It's a fifty-fifty chance."[28]

AI has been used to great effect by the beef and dairy industries, which identify and breed for specific physical traits. Despite its adoption by other breeds of racing horse, including the Standardbred, opposition to AI among Thoroughbred breeders remains fierce. AI has certain practical advantages in streamlining Thoroughbred production, including the reduction of sexually transmitted diseases and the elimination of travel for mares. However, no one to whom I spoke during fieldwork either in the UK or the US was keen to adopt the technology. They felt sure that the quality of the covering could affect the quality of the foal conceived. As a UK breeder told me, "The best winners I have ever bred have been by sires whose legs really pump away like pistons during copulation—I'm sure that some transfer of energy is capable of improving the chances of getting a good, energetic foal. What will fulfill those criteria with AI? I'm very worried about it." As anyone who has ever witnessed the process will agree, AI is not energetic, and the idea that the quality of the covering will affect the outcome effectively rules it out as a breeding possibility. AI may be capable of prompting conception, but what breeders are after is "good" or even "great" conception.

In the US, support for Tesio-like ideas took a slightly different form, and they

arose most frequently in discussions of dual-hemisphere stallions, and in the general trend to breed stallions to larger numbers of mares, described by some as "overbreeding." Traditionally, a stallion was syndicated on the basis that he would be allocated a "book" of forty mares, and its services for a season could be sold in the guise of forty "nominations." These nominations formed a currency. However, more recently, and acutely since the 1980s bloodstock boom, stallions have been bred to books of up to two hundred mares in the Northern Hemisphere, possibly followed by a winter in Australia serving another two hundred. In fact, stallions managed by the most commercially motivated owners have been bred to as many mares as they can attract, or to as many as the stallion can physically manage. This was a source of great anxiety to many of the breeders with whom I spoke, including one who asked me, "How can that be right? I mean three hundred mares? How can you possibly say that a stallion covering that many mares is going to be able to cover with any effect, let alone produce good quality sperm? He's Diet Coke! He's Marlborough Lights! He's literally screwed!" In this idea that the stallion could not produce high-quality sperm without time to recover his reproductive energy the breeders echo the thoughts of Tesio, writing fifty years earlier.

FROM THEORY TO PRACTICE

When I was trying to understand how breeders made decisions about matings I often got the questions wrong, let alone the answers. One Kentucky breeder told me to rethink: "Ask me again who I would breed to. But this time you have to tell me what you mean. Are you asking what I would breed to to get a good racehorse? Or are you asking me what I would breed to if I wanted a kick-ass yearling to sell? Because the two are completely different things. They aren't even the same question." He then ran through a number of what he called "real world" possibilities as he encouraged me to put aside my nostalgia for breeding theories of the past and "get real." My notes from our (one-sided) discussion are very clear, and he felt strongly enough about this issue to take plenty of time making sure that I had them absolutely right. The decision of which stallion to breed to will be influenced by the particular mare in question. As my informant said, "How much is she worth? You have to choose a stallion that is in her league. Has she bred already? How much did the yearling sell for"? If this mare has been bred with some success already, then some kind of repeat might be envisaged to produce a commercial foal. She may be "bred back" (bred to the same stallion again), or perhaps she might go to a stallion that is bred along similar lines to the first stallion but is enjoying greater popularity at that moment. She could be bred to a first-season sire that seems suited to her pedigree (other

similarly bred mares are producing winners from a similarly bred stallion) and produce that most desirable commodity, a member of a first crop that contains some stars at a relatively low fee. Her owner may be owed a favor by a stallion owner who offers a free cover. Her owner may owe a favor to a stallion owner and so will send his good mare to support a relatively modest sire. The breeder may know that a big buyer would find the produce of a particular mating attractive (a buyer who owns or buys similarly bred horses, for example) and so seek to produce that yearling. He might be offered a foal share agreement with someone who wants the produce of that match but does not want to bid for it at full price in the ring. According to my informant, the arrangements for breeding commercial yearlings are often ad hoc and reflect factors that only relate to breeding theories in the most speculative or tenuous manner, often retrospectively.

Breeding theories attempted to create rules that would result in the production of superior racehorses. The earliest examples were produced when this was a primary consideration of mare owners, before the sport of racing became international and highly commercial. Most Thoroughbred yearlings were produced on private studs to be trained and raced by their owner-breeders, men like Lord Falmouth, the Duke of Westminster, and the Duke of Portland. Such men and the accompanying considerations of breeding strategies have become increasingly rare. At present Sheik Mohammed's Godolphin, Khalid Abdullah's Juddmonte operations, and the studs of the Aga Khan come closest to resembling the motivations of these giants of the past who were more concerned with breeding and racing winners than with selling them. Despite these exceptions, however, the bloodstock industry has been transformed during a torrid twentieth century. Most breeders are now mare owners bidding to produce something they can sell. They do not have the luxury of contemplating what makes a good Thoroughbred, since they are caught up in a complex business that has more to do with advertising than it does with dosage.

My Kentucky breeder is suggesting that the basis of decisions regarding the production of racehorses lies not in breeding theories of the past, though these may be used to justify mating decisions or to explain the outcomes of coverings, but in the market for yearlings. Markets are of course social institutions, and explaining them requires an understanding of the people who constitute them and how their priorities are expressed within the confines of particular political and economic contexts. Investigating these phenomena and the connections between them furthers Varola's ambition to uncover the relationship between societies and the racehorses they produce and consume. The next chapter leaves behind the hypothetical luxury of the breeding theories and the question of how should Thoroughbreds be produced and considers instead how they are in fact produced.

CHAPTER FOUR

THE CENTERS OF THE WORLD

No two places in the world are more closely associated with the Thoroughbred than are Newmarket and Lexington. Other large-scale producers of Thoroughbreds—Ocala, Florida; The Curragh, Ireland; Chantilly, France; New South Wales, Australia—provide services including racing, training, and sales facilities, but these lack the same degree of international recognition. Newmarket and Lexington boast a historical association with the Thoroughbred and a contemporary identity that seeks to preserve that link: Newmarket is referred to as "Headquarters," or simply "HQ," and Lexington has recently fought for the right to call itself the "Horse Capital of the World." Both places are uniquely suited to their roles as industry leaders, making use of considerable social, geographical, geological, and political capital that has accrued to them over time. In fact, the two towns were officially twinned on 5 April 2003. For Thoroughbred breeders, Newmarket and Lexington are the centers of the world.[1]

The Jockey Club established their rooms on Newmarket High Street in the mid-eighteenth century. Although the Jockey Club now has offices in London, they remain the principal landowner in the area. There are two racecourses in Newmarket, the Rowley Mile, which was recently remodeled at a cost of £16 million ($29.5 million), and the July Course; there are seventy training stables and sixty stud farms. Many of racing's most important service providers (trainers, jockeys, bloodstock agents, auctioneers, lawyers, accountants) as well as committees and institutions (Thoroughbred Breeders Association, European Breeders Fund, International Racing Bureau, Equine Fertility Unit, Horseracing Forensic Laboratory, British Racing School, Federation of Bloodstock Agents, Animal Health Trust, National Horse-

racing Museum) are based in the town. About a third of the adult population in Newmarket work in the racing industry.[2]

Kentucky has been a producer of Thoroughbreds at least since the first advertisement for a Thoroughbred stallion appeared in the pages of the *Kentucky Gazette* in 1787. The state has five Thoroughbred racetracks (Keeneland, Turfway Park, Churchill Downs, Ellis Park, Kentucky Downs) and 460 horse farms in the area around Lexington called the Blue Grass. Like Newmarket, it is also the base of a large number of support services, subsidiary industries, and professional organizations, including the Kentucky Horse Park (a 1,200-acre equine theme park and location of the International Museum of the Horse), the Kentucky Horse Racing Authority, the Jockey Club (which also has an office in New York), the Thoroughbred Owners and Breeders Association, the Grayson-Jockey Club Research Foundation, the Maxwell H. Gluck Equine Research Center, and the North American Racing Academy, as well as racing newspapers *The Blood-Horse* and the *Thoroughbred Times*.

The scale of operations in the two towns is considerably different. There are about four thousand Thoroughbreds resident in Newmarket and its environs at any given time. Approximately half of these are in training, in the care of the seventy licensed trainers who operate from the stables in and around the town. The remainder is breeding stock on the stud farms of the surrounding countryside. In contrast, at the peak of the breeding season approximately thirty thousand Thoroughbreds can be found on the farms around Lexington. The horses in training housed at each of the five racetracks boost this population. Kentucky is the leading state in the North American bloodstock industry, the largest market for Thoroughbreds in the world. The town of Newmarket produces yearlings for the smaller European market. The two centers differ in scale and in orientation: Newmarket is a national center of administration, breeding, and training; Kentucky is a nursery for the Thoroughbreds of the world, as well as an administrative center for racing and breeding in North America.[3]

The explanations offered by my informants for the dominance of Newmarket and Lexington in their respective roles are interestingly contrasting. Thoroughbred breeders moved to Newmarket in order to exert their influence over the political process, relocating from farms further north where the first Thoroughbreds had been born. Their presence in Newmarket today is explained by the existence of an infrastructure and set of services, as well as a trained workforce that makes relocation hard to contemplate. In Lexington, informants invoked the unique topography and geology of the inner Blue Grass in order to account for the presence of the breeding industry. They explained that "the Blue Grass grows a great foal." However, their emphasis of physical factors obscures other social and political explanations for the

presence of the horse industry in Lexington. Thoroughbred breeders and racing professionals in both Newmarket and Lexington have successfully maintained their association with Thoroughbred production through their influence over land use, backed up by two unquestioned origin stories. The first of these emphasizes continuity through time, specifically the idea that the racing and breeding that takes place in Newmarket originated with James I. The second is that the unique organic properties of the inner Blue Grass, which come to be embodied by the livestock raised there, are responsible for the dominance of Kentucky over the rest of the Thoroughbred breeding industry.

THE CREATION OF HEADQUARTERS

The association of Newmarket with flat racing in its modern form dates from the purchase of land by agents acting for the Jockey Club, and it was strengthened by the patronage of important owners in the nineteenth and twentieth centuries. The longer history (as described in chapter 1) is, however, constantly evoked not only by its denizens but also by racing historians; it is commemorated by several landmarks around the town, particularly the newly renovated Palace House, and it is reflected in the town signs which depict a curly-haired and mustachioed Charles II and welcome the visitor to Newmarket, "Headquarters of Horse Racing." In fact, the reputation for propriety and the association with men of high status that racing in the UK maintains today originates in the Edwardian era, and not with James I or Charles II, who would find the kind of racing that takes place at Newmarket and the Thoroughbred horse that is bred there virtually unrecognizable. The sign should really depict Edward VII ushering the visitor along the road to the National Racing Museum, his mother frowning behind him. The reform of the turf by the Jockey Club, by Lord George Bentinck and Admiral Rous in particular, and the patronage of Edward VII enabled the royal association of racing to be reactivated. The training, breeding, and racing that takes place there today has far more to do with the characters of the late nineteenth and early twentieth century than it does with the Merry Monarch.

When racing became increasingly professional at the beginning of the nineteenth century, it was riddled with corruption and scandals. These tendencies reached a peak in "The Filthy Forties." The 1844 Epsom Derby was won by a "ringer," a four-year-old (Maccabeus) running as a three-year-old (Running Rein). Maccabeus was one of two ringers competing in the race; two other horses were doped; and another was "pulled" (prevented from winning) by his jockey. The "Running Rein Derby," as

it came to be known, epitomized the corruption that was rife at the time and created an opportunity for the Jockey Club, led at that time by Lord George Bentinck, the second surviving son of the fourth Duke of Portland. Bentinck hunted down the Running Rein miscreants and brought them to justice. In doing so, he established the Jockey Club as the upholder of turf morality and the distributor of discipline. The Duke of Portland had been a member of the Jockey Club for fifty years and owned a large portion of the Heath, which he first leased to the Jockey Club in 1753. By 1819, the Jockey Club owned most of the area. On the basis of this ownership, the Jockey Club claimed the right to raise a Heath tax and to disqualify or "warn off" any undesirables from its training grounds and racecourses. The first to be warned off was "Snipe," a tout who was found on the Heath with a telescope up his jumper in 1827. "Warning off" remains the most potent punishment available to the Jockey Club. Within this new administrative framework, and centered on a base constructed on private land, flat racing had ceased to be an opportunity for swindlers and cheats. The Jockey Club and Newmarket were at the center of this transformation.[4]

The most prestigious races of this time were dominated by owner-breeders including the Duke of Westminster, the Duke of Portland, and the Earl of Roseberry. Lord Roseberry, then prime minister, won the Derby in 1894. Lord Randolph Churchill, Lord Hartington, the Marquis of Londonderry, the Earl of Zetland, James Lowther, the Earl of Cadogan, and Henry Chaplin all combined their ministerial posts with membership in the Jockey Club. These powerful men, in their guise as the increasingly self-confident Jockey Club, took charge of racing, issuing new rules in 1858 and again in 1870. *The Rules Concerning Horse Racing in General*, devised by Admiral Rous, the younger son of the Earl of Stradbroke, set limits on the flat racing season, restricted two-year-old racing, fixed the shortest racing distance at five furlongs, and, most importantly, introduced a distinction between recognized and unrecognized race meetings. People and horses taking part in unrecognized meetings, not run under Jockey Club rules, risked being warned off. The Jockey Club also introduced a system of licensing, for jockeys, trainers, officials, and racecourses. The club had established itself as the governing body of racing by creating a unified sport with complex regulations, licenses, a defined season, and a sense of institutional coherence. The model of racing created at Newmarket was to be exported to racecourses across the country, and eventually across the world.[5]

George Lambton was one of the most vibrant characters of Edwardian Newmarket, and his memoirs, *Men and Horses I Have Known* (1924) captured the town during its golden age, a time of extravagant house parties, card playing, champagne quaffing, and high-stakes gambling. Lambton, educated at Cambridge and Eton and

the brother of Jockey Club member Lord Durham, was employed as a trainer by Lord Derby in 1893 after a career as an amateur rider at a time when most trainers were either tradesmen or servants. Since this appointment, the job of training racehorses has been considered a suitable occupation for a gentleman. About the same time, American horses and trainers arrived in Newmarket, fleeing the ban on gambling in New York. Owners including Ten Broeck, Pierre Lorillard, and H. P. Whitney brought their own horses, trainers, and methods. The town became a melting pot of ideas about breeding and training Thoroughbreds as well as a glamorous and cosmopolitan location for socialites from both sides of the Atlantic and all over Europe. According to Lambton, reaction to this influx was mixed: "I must say that at first the 'American invasion' was not much appreciated over here, and I frankly confess that I hated it for it upset so many of my old theories and ideas. Also, the crowd that came over was a pretty tough one." Lambton recalls asking John Huggins, who trained at Heath House for Lorillard and won the Epsom Derby in 1901 with Volodyovski, whether there were many rogues in America. Huggins replied that there were none left—they had all come to England.[6]

As well as a certain toughness, the Americans brought with them a new style of race riding, in the "monkey up a stick" style of Tod Sloan. This required a shorter stirrup and a greater sense of balance than the upright position it replaced. Sloan came to England for the first time in 1897 and returned regularly until 1900. He was a heavy gambler, and when his attempts to rig the Cambridgeshire (an important handicap race) failed he fired a volley of abuse at the winning rider. Following this outburst, and a number of other faux pas, the Jockey Club let it be known that his license would not be renewed the following year. Despite his turbulent career in England, his style caught on and was de rigueur by the turn of the century. The rhythm of races also changed. American jockeys were accustomed to riding races and workouts against the clock and had a sense of pace that was lacking in the British jockeys, who sought to beat the opposition by cunning as well as the ability of their horses. According to contemporary sources, races were run at a more consistent pace, rather than the "cat and mouse" style that British riders had favored.[7]

The Americans also brought lightweight shoes, stopwatches, and weighing scales (to help them judge the condition of their horses). English trainers had always depended upon their eyes to tell them when a horse was fit and when it had put in a good run. To them, training was an art. Furthermore, they were disinclined to be replaced by a stopwatch and a list of timings, or a set of weighing scales. The use of stopwatches and weighing scales remains a contrast between traditional UK trainers and their colleagues in the US today. I rarely saw trainers using stopwatches on the Heath, and many of them strongly condemned the practice. By contrast, all serious

exercise in the US is timed and you can often identify trainers by the digital stopwatches swinging from cords around their necks.

According to Lambton, the least appealing innovation in training methods brought over by the Americans to Newmarket at this time was doping. The practice became so widespread between 1900 and 1903 that Lambton despaired of the authorities and took matters into his own hands. As an experiment, he began using (with the knowledge of his brother, Lord Durham) a performance-enhancing drug he refers to as "dope." Lambton bought six dopes from a veterinarian and used five of them, all on talentless horses. He had four winners and a second: "Their effect on a horse was astonishing," he wrote. The next year, the Jockey Club banned doping and Lambton wrote that the problem was greatly reduced. Many of the Americans decamped to France. Even today, Lambton's description of the "American invasion," the introduction of doping, and the use of mechanical measures of performance are still invoked by some members of the Newmarket racing establishment as representative of differences between racing in the US and the UK. As one Jockey Club member told me, in the presence of approving jockeys and trainers, "The dope came over with the Americans. And stopwatches, other kinds of gadgets. All to Newmarket. Lambton did the right thing; he was backed up by the club. They carried the day, thank god. The Americans had to take it all home with them, and look where it got them. Now they can't get these blessed things out of their game."[8]

NEWMARKET TODAY

Today, there are still horses wherever you look in Newmarket. Real ones, trailing through the town each morning, as well as any number of artificial stand-ins: sculptures, murals, even graffiti, keeping watch during the day. Two thousand horses are trained in Newmarket, on sixty miles of gallops connected by fifty-seven miles of horse walks that traverse the town via controlled crossings that drive motorists crazy. Each morning, Newmarket is subjected to a horse invasion. They appear on the Heath from all directions, spilling out of town streets, looming over the horizon, in large gangs or in ones and twos. Some are under the control of their diminutive riders, others less so. They congregate at the base of the choicest gallops of the day, before hurtling up them, in front of small audiences of trainers, owners, journalists, touts, and tourists. The Heath, site of this daily ritual, is the focus of a set of concerns and activities that dominate daily life in the town.

On the approach to Newmarket the roads are lined with clipped hedges and painted post and rail fences, manicured verges, and fields full of shiny horses. Electronic gates embossed with rearing horses interrupt the hedgerow from time to time.

Security cameras survey vulnerable perimeters. This is the studscape, approximately nine thousand acres of rolling pasture divided into five-acre paddocks by horse-friendly barriers, dotted with barns and stable blocks. The most prestigious studs in England are to be found here, offering the services of some of the most expensive stallions in Europe. The most important of the sixty studs in Newmarket belong to the ruling family of Dubai, reflecting the current international balance of power within the sport. The most involved of three brothers, Sheik Mohammed bin Rashid Al Maktoum, is vice president and prime minister of the United Arab Emirates (UAE), and crown ruler of Dubai. Sheik Mohammed owns eight studs in England, including Dalham Hall Stud on Duchess Drive in Newmarket, which stands twelve stallions. The other most influential breeder in the town is Saudi Arabian Prince Khalid Abdullah (first cousin and brother-in-law of the late King Fahd), owner of Banstead Manor Stud in the satellite village of Cheveley. Other notable studs include Plantation Stud in Exning, recently sold to Irish property developer and Thoroughbred owner Dermot O'Rourke but previously owned by popular owner-breeder Lord Howard de Walden (until his death in 1999). Plantation Stud is home to 1985 Derby winner Slip Anchor, among twenty-four other stallions. Slip Anchor was foaled at the stud and now lives in a vast stable, one wall of which is given over to a roll of honor listing his own achievements as well as those of his offspring. The recent sale of Plantation Stud was conditioned upon his being allowed to continue to live there. Newmarket is also the site of the National Stud, developed from stock donated by Lord Wavertree in 1915 and moved to its present location by the July Course in 1964. Cheveley Park Stud, made famous by the Duke and Duchess of Rutland in the nineteenth century, stands nine stallions and is probably the oldest stud in the area, with buildings dating from the sixteenth century.[9]

The association of Newmarket with breeding Thoroughbreds dates from the end of the nineteenth and the beginning of the twentieth century, when its place at the center of racing administration was assured. Before this time, most serious horse breeding had taken place in the north of the country, particularly in Yorkshire. James D'Arcy (1617–73), appointed master of the royal stud by Charles II in 1660, was based at Sedbury Stud at Bedale, where he was responsible for the breeding careers of a number of important foundation mares including "the Sedbury Royal Mare" and "Old Bald Peg." Sledmere Stud, founded in 1801 by Sir Tatton Sykes, and Burton Agnes Stud, founded in the early 1900s by Thomas Wickham-Boynton, continued this tradition and were the dominant commercial studs of their time. Not only breeding but also training was traditionally part of the life of the north, particularly Yorkshire. Today, clusters of trainers can be found in Middleham and Malton, along with about eighty studs. There is a healthy rivalry between north and south in racing

and breeding. The relatively recent dominance of Newmarket in both areas stems from the concentration of the most influential political forces in the town.[10]

As one gets closer to Newmarket, stud land is exchanged for the Heath, a vast open area separated from the road by tall, thick hedges, designed to contain loose horses who have jettisoned their unlucky riders. Beyond the hedges to the northeast and southwest of the town lies the hallowed turf, the racecourses and the springy gallops that have not been ploughed for more than three hundred years, the product of an outcrop of chalk. This land, and the town itself, jointly referred to as the "Newmarket Horseracing Interest Area" is fiercely protected by racing professionals and, to a lesser degree, by the local authority, the Forest Heath District Council. The Horse Racing Policy of 1988 reiterated the priorities that had been put in place by the Newmarket Town Map of 1958, which stated that "all existing land uses to remain and change of land or premises to non–horse racing use will not be permitted." These priorities are at the center of the local plan that governs changes in land use in Newmarket today. In terms of construction and land use, very little of Newmarket has changed since the 1950s. Many of the stables are Edwardian, and some, including the Palace House Stables, built by Charles II, much older. The Jockey Club remains the most powerful landlord in Newmarket. It currently owns 4,500 acres of land (2,800 of which are training grounds), three studs, a farm, seventy-five residential properties, and twenty commercial properties. This portfolio includes both the racecourses, the Links golf club, the National Stud land, the National Horseracing Museum, twelve leasehold training yards, and two restaurants. Despite the stability of land use in the town, many racing professionals are anxious that the housing shortage in southeast England will eventually lead to the unwelcome development of stud land.[11]

The land surrounding Newmarket is, for the time being, strikingly uniform and impressive (though not on the scale of the Blue Grass). However, the town itself is not prepossessing in the way that its reputation might suggest, particularly if it is viewed during the afternoon of a nonrace, nonsales day when the streets are empty of horses and people. There are some architectural gems, including the recently restored Palace House and the Jockey Club Rooms, but these are outnumbered by monstrosities such as the Rookery Shopping Center and the Church Hall on the High Street, fronted by a garish mural of the Virgin Mary. Even the famous clock tower at the top of the High Street seems lacking in size, grandeur, and antiquity. It is difficult to reconcile the role played by the town in the history of a sport as self-confident and cosmopolitan as horseracing with such a drab little place.

In a sense, however, the town fits its present function perfectly. It is no longer a gambling hot spot, nor a glamorous location for the king and his entourage to enjoy a

little of the high life. Even the extravagant lifestyle of George Lambton's time is a distant memory. Today, Newmarket is a place of work. The drudgery involved in producing racehorses capable of competing at the top level is beautifully reflected by the High Street and its seven grimy pubs. Each of the training yards is staffed by people who work long and antisocial hours for very low wages (a life described in chapter 7). The relief on offer to these people is an opportunity to socialize with colleagues while consuming cheap alcohol and food. Needless to say, this is not for everyone, and some of the older lads spurn the dubious pleasures of the High Street for their own homes and families. Best served by the High Street are the teenagers who travel from all over the country to work in Newmarket. Of those with whom I spent my fieldwork some had completed courses at the Northern School of Racing, and still more had been to the British Racing School in the town. Others had come from racing in Ireland in search of a change. A few of them still harbored the dream of riding in races, but most had come to accept their roles as stable workers. Their priorities were very simple: enjoyment, in any form available to a young person with very little money, surrounded by like-minded people with no authority figure in sight.

The High Street can be an unforgiving environment, designed solely for the pleasure of the young, fit, and carefree. When I thought of myself in these terms, I spent great times drinking with friends and colleagues, being offered cheap drugs and singing Karaoke (badly). Drugs were widely available in the High Street pubs, and heroin addiction is a huge problem for the town. This hedonistic lifestyle is conducted on a financial shoestring by many of the stable workers, some of whom subsidize their income by working two jobs, or selling information about their horses to gamblers, or through other activities that take place within the informal economy, ranging from working "cash in hand" to burglary. One of my colleagues was well known for his musical tribute to Elvis and would perform in pubs and at parties in the evenings before returning to work at dawn. Another charged a small fee for completing official documents on behalf of illiterate colleagues.[12]

Buying cheap bottles of fizzy wine in a tacky nightclub after having won a very small race, treating ourselves to rancid burgers from a van, driving home drunk along the racecourse performing hand brake turns: these were the fun times. The camaraderie of the yards of Newmarket can be thrilling, and this goes some way toward accounting for the fulfillment and excitement that such a lifestyle can sometimes offer, despite its lack of more obvious rewards. Lads strut around the town and around the racecourse during the race meetings, hailing friends, completely at ease. They relish their part in the world that many people can only observe from the outside, and they patrol the boundaries of this society through their own apparent self-sufficiency. Trainers rarely venture onto the High Street at night and instead entertain owners and

other guests at their houses or in one of the many "gastropubs" in the surrounding villages that cater to their tastes, including the famous Star Inn at Lidgate, which is usually stuffed full of racing professionals. The High Street is the lads' domain.

Newmarket is the dominant force in UK racing, consistently fielding the majority of winners in the better classes of race. On average, horses trained in Newmarket account for almost three-quarters of Group One races (the highest-rated races in the country). It is home to many of the most successful trainers in the UK, including Saeed Bin Suroor (Sheik Mohammed's trainer), Henry Cecil (winner of twenty-three English Classics including four Epsom Derbies), and Michael Stoute (winner of eleven English Classics, plus the Dubai World Cup and the Breeders Cup Turf). A number of the town's yards are very beautiful. Most are set out as a single courtyard or series of courtyards. The trainer's house and lads' accommodation are often within the grounds. The seventeen yards in the town center date from the end of the nineteenth century, and what they lack in practicality they make up for in charm. Yards absorb successes, and previous incumbents are looked to for inspiration. Many trainers told me that they felt as though they were custodians of a piece of racing history, rather than the owners of their yards. Park Lodge Stables, for example, the most central and one of the oldest yards in Newmarket, is currently occupied by James Eustace, but it was made famous by Jack Jarvis. Jarvis was Lord Roseberry's trainer for thirty-nine years and a member of the Newmarket training dynasty of three families related by marriage: the Jarvises, the Waughs, and the Butters. William Jarvis, son of trainer Ryan Jarvis, trains in Newmarket today. Some yards, including Pegasus Stables, built in 1886 to house jockey Fred Archer's coach horses, are said to be haunted. Fred Archer makes a particularly good ghost. He never recovered from the death of his wife in childbirth and shot himself in a depressive fit brought on by rapid weight loss through sweating and the consumption of diuretics. The pistol he used is housed in a somewhat sinister display in the British Horseracing Museum, alongside his diminutive boots.

Newmarket's trainers are acutely aware of the racing history they are inhabiting, and none more so than those who count racing's greats among their ancestors. One told me, "My family has been training in Newmarket for five generations. The average trainer lasts six years in Newmarket . . . my family has lasted a hundred and fifty years. That tells you something." Several of Newmarket's present cohort are continuing the work of their fathers or other relations, including Ed Dunlop (son of 1995 British champion trainer John Dunlop), Luca Cumani (son of ten-times champion trainer in Italy, Sergio), and James Fanshawe (nephew of champion jump racing trainer David Nicholson). Others are former riders, amateur or professional, reproducing Lambton's entry into the training ranks.

In addition to the training yards, Newmarket also hosts a huge variety of subsidiary services to the racing and bloodstock industries. Unlike Lexington, the town itself is unmistakably concerned with a single industry. Even the nonracing shops and services in Newmarket seem singularly well suited to the needs of the racing community, who can get a Chinese meal from Golden Horses, presents from the Gift Horse, and fine art from Chifneys (which takes its name from a kind of bit, named after a famous trainer, Samuel Chifney). The local newspaper, the *Newmarket Journal*, advertises itself as "a thoroughbred staying the distance in the Newmarket field for more than 130 years." The local football team is called the Jockeys. Every unimaginative shopkeeper on the High Street encourages passers by to "Bet on us!" for power tools, perfume, or mops. The restaurants serve first courses, "under starter's orders," main courses, "Derbies," and desserts "at the finish line." Pubs and restaurants are full of racing prints and photographs. There are also remarkably old-fashioned yet expensive clothes shops able to kit you out in the style of an English gentleman or lady; one of them still stocks men's one-piece bathing suits. There are shops selling designer wear, though even this is more likely to be "classic" rather than cutting edge. As the best-known dressmaker in the town explained to me, "Ladies like smart things with feminine twists. Nothing fussy. Gents like good quality, good cut, plain. Nothing fancy. Shoes must be practical. It's all very well having heels and a strappy look, but you might have to lead a horse across grass or goodness knows what, and you don't want to leave a shoe behind."

The people of Newmarket are conservative in their tastes, unlikely to regard the height of fashion as anything other than absurd and impractical. The trainer I worked for was concerned with his appearance and dreaded outward display of any kind, cringing at those he pointed out everyday at the racecourse and describing them, with a grimace, as "nouveaux riches." He pined for a time when, as he told me, "people knew their place and would let me get on with training horses. Nowadays, you get someone who thinks he knows about horses just because he has made a lot of money buying cars or something. There's a difference between being rich and being wealthy, Rebecca. The wealthy know their place. The others have ideas above their station. What I'd call a lack of breeding." Despite the insistence of some members of the training community that the life of a trainer has changed beyond recognition, Newmarket has allowed a particular way of life to be preserved. The High Street and its abandonment to the lads, the preservation of the yards, the Heath, and the stud land reflect the same kinds of relationships that gave rise to this landscape. The status of Newmarket as "Headquarters" depends upon the continuing relevance of these connections with the past.

KENTUCKY IS THE DADDY

In spring 1775, when Felix Walker first cast his eyes upon the Blue Grass region of Kentucky, he was convinced that he and his fellow travelers had found their promised land: "It appeared that nature, in the profusion of her bounty, had spread a feast for all that lives, both for the animal and rational world. A sight so delightful to our feelings and grateful to our feelings, almost inclined in imitation of Columbus, in transport to kiss the soil of Kentucky, as he hailed and saluted the sand on his first setting foot on the shores of America." Kentucky's earliest explorers and settlers produced numerous descriptions of the area as a kind of paradise. John Filson, in 1784, called it, "the best tract of land in North-America, and probably the world." In the breathless reports of travelers, Kentucky was "equaled by Few Places on the American Continent," its soil "fit for producing commodities of great value with little Labour." In short, it was "delightful beyond conception." Many of these recommendations were little more than propaganda produced by local agents, who were all too willing to sell land that their extravagant praise suggested was priceless.[13]

In practice, Filson wrote of variations in quality: "A great deal of the soil is amazingly fertile; some not so good, and some poor." In terms of productivity, the inner Blue Grass, of Scott, Bourbon, Clark, Fayette, Jessamine, and Woodford counties, was by far the most important, overshadowing the contribution of the surrounding woods and hills. Hyperbole aside, the fertility of this region proved sufficient to enable emigrants to reproduce an agrarian society similar to, or even surpassing, that of southern England or Tidewater Virginia. The rapidity of the transformation from wilderness to bustling metropolis was remarkable. In 1795, newspaper editor Joseph Charless described the banks of the Ohio as "a dreary wilderness, the haunt of ruthless savages." On a return visit two decades later they were "sprinkled with towns . . . spinning and weaving establishments, steam mills, manufacturers in various metals, leather, wool, cotton and flax." There were even "seminaries of learning conducted by excellent teachers." Samuel Brown, author of the *Western Gazeteer*, marveled at the remarkable transformation of the town of Lexington, from a group of around fifty houses "partly frame and hewn logs, with chimnies on the outside" at the time of his first visit in 1797, to "a large and beautiful town" in 1816: "The log cabins had disappeared, and in their places stood costly brick mansions, well planted and enclosed by fine yards, bespeaking the taste and wealth of their possessors."[14]

Based on the fertility of the inner Blue Grass, Lexington became the "commer-

cial and industrial capital of western America." The rewards of this growth were, however, distributed unevenly. In 1808 Lexington's assessment records indicated that more than one-third of the total valuation of over $1 million belonged to just sixteen merchants and manufacturers. As Kentucky grew, and as a minority of people became increasingly wealthy, country estates were constructed, including Henry Clay's Ashland, David Meade's Chaumiere du Prairie, and John Breckenridge's Cabell's Dale. In 1816 Hezekiah Niles wrote that "society is polished and polite, and their balls and assemblies are conducted with as much grace and ease as they are anywhere else, and the dresses at the parties are as tasty and elegant. Strange things these in the 'backwoods'!" Exquisite villas, sumptuous parties, fashionable clothes, and dancing were complemented by the other traditional occupation of the country gentleman, breeding and racing Thoroughbreds, and Kentucky's first jockey club was formed in 1797.[15]

Advertisements for the services of Thoroughbred stallions appeared in the *Kentucky Gazette* from 1787 onward. Imported stallions, which had stood with some success in the East, were brought to Kentucky and Tennessee, their fees reduced by age. In 1803, for example, the merchant John Wesley Hunt advertised the imported Thoroughbred Baronet. Baronet had been foaled in England in 1785, exported to New York in 1791, and sold to Phillips, Hunt's partner, in 1803, for two thousand dollars. Hunt's efforts to create interest in the stallion's services were wasted, in that the horse died shortly after making the arduous journey from New York to Lexington. The loss did not deter Hunt, who continued to import stallions, some of which succeeded in turning a profit.[16]

The first Blue Grass farmer to devote himself to Thoroughbred production was A. Keene Richards, who was also a great student of Arab horses. He twice visited the Middle East (in 1851 and 1855) and imported several Arab stallions, which he bred to his own mares in an unsuccessful attempt to improve the breed. The most influential of the early Thoroughbred breeders was Robert Aitcheson Alexander, who took control of Woodburn Farm in Woodford County in 1849 and began to purchase Thoroughbreds in 1853. Alexander had inherited his considerable wealth from a Scottish uncle, while at Cambridge. He stood champion horse Lexington, who dominated the Civil War era and produced the stock best suited to the kind of racing that emerged in the final decades of the nineteenth century. Elisha Warfield, an important member of the Lexington Jockey Club, had bred Lexington in 1850. He was sold for $2,500 as a three-year-old to Ten Broeck, a Mississippi gambler, and sold by Broeck to Alexander in 1856 for the unheard of amount of $15,000. Alexander had been widely disparaged for paying such a price, and he took great satisfaction in selling one of Lexington's sons, Norfolk, to Californian Thoedore H. Winters for

$15,001. Lexington dominated the breeding league tables of the time and was champion sire sixteen times. Although the influence of Lexington the horse eventually waned, the association of the Blue Grass with the breeding of Thoroughbreds went from strength to strength.[17]

Thoroughbred breeding in Kentucky was initially a haphazard affair, but with the creation of the paraphernalia necessary to establish a closed breed, as well as authorities to control racing, breeding of a completely different order developed. In 1868, after a number of false starts, the American studbook was created by the resourceful Kentuckian Colonel Sanders D. Bruce. The studbook codified the bloodstock industry that had been in existence from the time that Kentucky was first settled. It consolidated the value of stock in a form that reinforced the practice of selective breeding and protected the investment of those who were already involved in the business. Providing an authority according to which disputes could be settled and deals could be made, it produced a demand for other kinds of bureaucracy that reinforced the position of the breeders and gave veracity to the region's claims to specialist knowledge.[18]

As well as gentlemen breeders, both incomers and natives, the Blue Grass began to attract men from a variety of backgrounds who made horse breeding their business. Perhaps the first of these was Major Barak Thomas, who settled on 250 acres on the Russell Cave Pike in 1877 and bred Domino, the fastest two-year-old of this era. The most successful of these Blue Grass businessmen was John E. Madden, "America's greatest horseman," born in 1857 in Bethlehem, Pennsylvania, the son of an Irish mineworker. Resourceful and physically fit, Madden made money initially from running in foot races, and later from trotting horses. He came to Kentucky at the age of thirty and made his name in the newly organized sport of racing. The structure of the sport dates largely from 1894, when the American Jockey Club was formed in New York, replacing the unsuccessful Board of Control which had been formed in 1891 to control widespread corruption. As the English Jockey Club had done in 1870, the American Jockey Club established rules and licenses, appointed stewards, and determined the dates of meetings. The club also purchased the American Stud Book. As in England, the Jockey Club became the central racing authority. Newfound stability created significant commercial opportunities for men like Madden, who bred 182 stakes winners from his base at Hamburg Place, near Lexington, between 1898 and 1929.[19]

The twenty-seven founders of the Jockey Club reflected a certain social consistency, but the same cannot be said of breeders in the Blue Grass. Although Belmont, Phipps, Vanderbilt, Whitney, and Widener are all names that appear regularly on the Blue Grass role of honor, they are alongside the names of Colonel Milton Young

of McGrathiana and Colonels Clay and Woodford of Runnymede, who dominated the commercial production of Thoroughbreds from the end of the Civil War until the close of the nineteenth century. Even the gentlemen breeders of the Blue Grass were a refreshingly mixed bag. James Ben Ali Haggin of Elmendorf, born in Kentucky in 1822, for example, was the grandson of a Turkish army officer. He made his money in mining in California and created what some have described as the biggest breeding establishment of all time at Rancho del Paso near Sacramento. In 1897 he returned to Kentucky to raise horses. There he built a vast Greco-Roman mansion, one of the many testaments to the huge egos at play in the Blue Grass at the time; at present only the pillars of the portico, the steps to the entrance, and the ceremonial lions survive.[20]

Colonel E. R. Bradley was a contemporary of Haggin with a similarly colorful past. In contrast to the "founding father" backgrounds of many of the Jockey Club elite, Bradley had been a cowboy and had known Wyatt Earp and Billy the Kid, while striking it rich in gold. He invested in property in Chicago before moving to Florida in 1891, opening the Beach Club, an exclusive gambling joint, and making a second fortune. In 1905, acting on his doctor's orders to take things easy, he leased and then bought Idle Hour Farm, where he pursued a highly successful policy of inbreeding between the daughters of Blue Larkspur and the sons of Black Toney. Bradley died in 1946, having bred and raised four Kentucky Derby winners: Behave Yourself (1921), Bubbling Over (1926), Burgoo King (1932), and Broker's Tip (1933).[21]

Although some of the founders of the Blue Grass breeding industry created human as well as equine dynasties, many outsiders have continued to enter Thoroughbred breeding. Some of these men and women have married well, thereby attaining a degree of local respectability; many have simply bought and bred good horses. Some have come with money and left without, and a few have caused considerable scandal in the process. Although it is virtually impossible to enter into breeding without money, it is possible to come without knowledge or connections. Today, the most powerful farms in the Blue Grass are on land that has long been associated with famous breeders and their horses, but the people that own and run them are just as likely to be computer magnates, Texas oil men, Middle Eastern sheiks, or communications barons as they are to be Kentucky "hard boots" born and bred.[22]

The most influential Blue Grass breeders of the twentieth century were a mixture of Kentucky natives and incomers. Leslie Combs II, the infamous patriarch of Spendthrift Farm, who dominated the racing scene during the notorious bloodstock boom of the 1980s, was second generation, and proud of it, as was "Bull Hancock," his competitor at Claiborne Farm. Despite their considerable impact (between them

they are probably responsible for syndicating the most valuable stallions of all time), their achievements must be placed alongside those of incomer John Gaines, of Gainesway Farm, who came to the Blue Grass as a teenager from New York in 1944. Gaines was an innovator, who was responsible for many of the changes in breeding practices that are described in the next two chapters. He was also the driving force behind the Breeders Cup, the series of international championship races held at the end of the season in North America, which he hoped would succeed in making racing a popular sport once again. More recently, during the 1980s, former ambassador to England Will Farish relocated from Texas to Lane's End in Kentucky, where he now stands twenty-two stallions. The latest group of incomers to make their mark on the area includes the Irish breeding organization Coolmore, the Dubai royal family, and Saudi Arabian Prince Khalid Abdullah.

BLUE GRASS

During my fieldwork, the great and good of Lexington, Kentucky, and Ocala, Florida, entered into a squabble over which of the two cities had the right to describe itself as the "Horse Capital of the World." The argument was not based on numbers but on more nebulous claims to specialism. It seems that Lexington won this battle, as Dick Hancock, vice president of the Florida Thoroughbred Breeders' and Owners' Association, graciously conceded: "To make sure there were no hard feelings we didn't go after the word 'Thoroughbred.' We don't want to diminish Lexington's role in the Thoroughbred industry. It sets a mark we would love to achieve." After my first visit to Kentucky, I realized that I had been deluded about the importance of Newmarket in the international bloodstock scene. As one of my first informants, a breeder who had lived in Kentucky all his life, confirmed, "Yup. Kentucky is the Daddy." At first glance, Lexington itself is not so obviously associated with horse racing as is Newmarket. In fact the city itself is undistinguished if not unpleasant. The most obvious landmark is the enormous Rupp Arena, which hosts the Kentucky Wildcats, the university basketball team, the subject of more discussion than racing within the majority of the population. Even so, Lexington is the focal point of the Thoroughbred's section of the Blue Grass, which it shares with tobacco and bourbon, a sensational mix. The approach to the Blue Grass airport is the most romantic I have ever experienced, particularly for a horse enthusiast. The window-seat passenger is treated to an aerial view of Calumet, perhaps the most famous stud of all time, resplendent with red and white barns and fences, and then Keeneland itself, the only racecourse in the United States that claims royal connections, having been visited by Queen Elizabeth II. The airport is located in prime stud land, five miles from the

center of town on the New Circle Road that circumnavigates the city (except where Keeneland interrupts its progress with an obstinacy that many breeders find reassuring). On landing in Lexington one finds oneself in the midst of the famed bluegrass.[23]

In Kentucky the physical properties of the environment are offered as an explanation for the greatness of the horses raised there, in a way that is not replicated in Newmarket. In particular, I was told time after time that the Blue Grass "grows a great foal." This explanation has considerable historical depth. Writing in *Kansas Magazine* in 1872, Senator John James Ingalls wrote of a social hierarchy of grasses and placed bluegrass firmly at the top, reasoning that "the sour, reedy herbage of swamps is baseborn. Timothy is a valuable servant. Redtop and clover are a degree higher in the social scale. But the king of them all, with genuine blood royal, is Blue Grass." Ingalls explicitly linked the properties of the Blue Grass with the qualities of the men and horses raised there, writing, "There is a portion of Kentucky known as the 'Blue Grass Region' and it is safe to say that it has been the arena of the most significant intellectual and physical development that has been witnessed among men or animals upon the American continent, or perhaps upon the whole face of the world. In corroboration of this belief, it is necessary only to mention Henry Clay, the orator, and the horse, Lexington, both peerless, electric, immortal." The idea that the environment in which they are raised can influence people's character is of particular interest to anthropologists concerned with notions of belonging: how people express their loyalty to and connection with a place. In Kentucky, this idea is based explicitly upon the inherent goodness of the land and its fit with a particular way of life.[24]

The origin of *poa pratensis* is controversial among both Kentucky horse farmers and agronomy experts. The earliest references to bluegrass in Kentucky include a map in *Voyages of Nicholas Cresswell in America* dating from 1774 to 1777, a description by geographer Jeremiah Morse of Kentucky as "covered with clover, blue grass and rye," and an advertisement for a farm of seventeen acres sown with clover, bluegrass, and timothy, featured in the *Kentucky Gazette* of 16 February 1793. None of these references proves that the grass was not imported in the pockets of emigrants, as agronomists have suggested. My informants were keen to claim bluegrass as their own, but at the same time they were aware that they could not afford to be too defensive on the matter. If, in order to be authentically Kentuckian, one needed to be indigenous to the region, then this would exclude not only themselves but also the Thoroughbred. They compromised by emphasizing the perfect fit between bluegrass and the Blue Grass, telling me, "You only need to look at this place and see that the bluegrass was meant to be here. When God created the Thoroughbred he had to make a carpet for him to run on, and this is it."[25]

When I returned from Kentucky to London, many of my friends asked the same

question, "Is it really blue?" And of course it really is blue, when you have had a hit or two of bourbon and you are sitting with good friends looking over a favorite meadow, dotted with Thoroughbreds, grass rippling gently in the wind. My ability to see the blue all around me came easily. This landscape is one that can seduce all but the hardest heart, and I met people from all over the world (including Newmarket) in Kentucky. It was a hard place to leave, they told me. Many of my informants took me to see what they thought was the most beautiful section of the Blue Grass. However, to the disappointment of many, my favorite view was from the top of the stand on an abandoned (but once great) training track, right out in the country. One of my informants had been banned from training horses after some time in jail and was hiding out at this disused farm, still training a small string. Each morning he would climb the steep steps up to the stand to watch his horses work, and I would follow him, trying to avoid looking up the stairs and through the holes in his jeans. This was not a man whose budget stretched to underwear. When we reached the top I was always treated to a view that made the unwelcome sights of the climb worthwhile. In the foreground were racehorses, jig jogging around a dirt track. In the middle of the track were mares and foals, wandering around the wreckage and detritus of the ruined farm lot. And in the distance there was the Blue Grass, laid out like a quilt, gently rolling land, parceled up into even but not uniform patches, divided by hedges and trees of an inexhaustible variety of colors. This was the down-home version of the immaculate patchwork of stud land that trainers and breeders constantly brought to my attention. When I was in Kentucky, I was taught to appreciate the landscape by the people who live and work there. It is an essential part of how they perceive themselves and their horses. It is not just its surface appearance that they value, but also its hidden properties.

The Blue Grass is located on limestone, dolomite, and shale. The presence of limestone is one of the most common explanations offered for the excellence of stock raised in the area. One of Lexington's native sons, a Triple Crown–winning trainer, was more than happy to give me a geology lesson when he overheard me mention the word "limestone." He explained the nutritional values of grass raised on limestone and the resulting superiority of foals. He also emphasized the capacity of the area to breed people he described as "horsemen": "Now I'm not talking about your average horseman like these guys from Ireland who talk a good game but know nothing . . . I'm talking about someone who has racing in their blood. Not just racing. Horses . . . Someone who can go in a barn and look in a horse's eye and see that something's wrong. He's got a sense of horses. He's been brought up on this land, and he gets that sense from here." It was striking to hear the opinion of Senator Ingalls echoed so forcefully by a contemporary source.

The stone walls that enclose the most famous of the studs echo the desirable properties of the land; the precious substrata is displayed on the surface, hinting at subterranean qualities. The presence or absence of limestone—and its depth from the surface in particular areas—was the subject of many heated discussions during my fieldwork. There is an optimum depth at which limestone is thought to contribute to the composition of the soil and therefore the grass and water that nourish the foal. If limestone is too close to the surface, it can produce poor soil. If it is too deep, it may not be able to influence the surface phenomena. Many of my informants had different ideas about the optimum depth. Each of them was convinced that his or her own land was the greatest example of this geological arrangement. During my fieldwork, two brothers, one a geologist, offered a service of finding the best land to purchase for breeding horses. One of the brothers remarked on a plan to create more studs in the Blue Grass by saying, "This is what Central Kentucky needs to be . . . And right now there is land that should be in horse farms that has houses going up and sewers going across it."[26]

The Blue Grass has escaped the powerful forces of agribusiness and remains an oasis of low-density, high-value stock keeping. As a result, the ethos of "soil and stream" has been preserved. Every native of Kentucky with whom I passed the time of day was happy to talk to me about his home in terms that echo the adoration of the earliest commentators. One stud manager told me, "We get the best weather. We've got the best land. The land around you now, it's priceless. It's pretty too. This is the healthiest goddamn patch of earth god ever made. Drop a seed and it'll grow practically before your eyes. Knock it back and it'll come right back at you. There's nowhere like it on earth." Only very recently, as Lexington has been rocked by Mare Reproductive Loss Syndrome (MRLS) and Fall Fetal Loss Syndrome (FFLS) has this utter faith in the goodness of the Blue Grass environment been questioned.

In the spring of 2001, hundreds of mares lost their foals in an abortion shower that spread throughout the area. MRLS had two separate phases in both 2001 and 2002. First, in the early part of 2001, 500 foals were stillborn; then 3,500 mares aborted early. In 2002, 150 foals were lost late term and 1,000 mares aborted. The total cost of the MRLS of 2001 has been estimated at $336 million for all breeds of horse in Kentucky and at $300 million for Thoroughbreds alone. Neither syndrome has a single cause, although MRLS has been linked to eastern tent caterpillars, which had infested wild cherry trees, found on many studs. Stud owners and managers were reluctant to remove the cherry trees that form part of the distinctive appearance of the Blue Grass. As Joe Williams, the manager of Elmwood Farm, said at the time, "I have a few more to cut down and I hate to do it, but I'm sure going to do it, because I can't afford to lose those pregnancies."[27]

The culling of the cherry trees has changed the landscape, but the very possibility that the environment contains a poison capable of killing foals has had a more profound effect. One breeder told me, "I just always took for granted that whatever I did I could only mess up what was already here naturally, and if I tried to work together with Mother Nature then I wouldn't go too far wrong. Then this comes along and throws up that whole way of thinking . . . I guess I lost my faith! I'm lapsed!" The equation of the natural environment with the stud landscape is interesting, because it is intensively worked upon to retain that appearance, just as the Thoroughbred is (naturally) selectively bred. The idea that expectations of the goodness of the Blue Grass is comparable to a "faith" is also striking. The trauma of MRLS has been felt not just in personal and financial terms, but for many Kentuckians also in existential terms.

The landscape around Lexington exudes wealth and tradition. White post-and-rail fencing and limestone walls (both notoriously expensive to construct and maintain) enclose rolling pastures. Immaculately landscaped grounds surround breeding sheds that look like chapels, and are certainly shrines to the Thoroughbreds that do their work there. Stud owners continue to build enormous houses and stallion barns, as Haggin did at the end of the nineteenth century. Stables, houses, and barns are color coordinated, gravel is raked, weeds are banned. No kind of unregulated intrusion is allowed to disturb the harmony of the studscape. The first time I looked at the landscape I was reminded of an international exhibition that seeks to capture and reproduce the essence of a specific region or nation. In this case, the Blue Grass looks like an imitation England, because nowhere in England (except perhaps Newmarket) is the landscape quite that perfect. The invention of the Blue Grass and its attendant way of life came about through the determination of Kentuckians to associate the fortunes of the Thoroughbred breeding industry with the area. This determination is still present today, among an "imagined community" who consider raising horses to be the only fitting use of the inner Blue Grass.[28]

According to an American Horse Council survey in 2005, the Kentucky breeding and racing industry is worth $3.5 billion. During my fieldwork, the Kentucky Thoroughbred Association paid for a gigantic billboard at the junction of highways Ky 421 and US 60 to advertise this fact during lobbying season. In 2002, the incentive package offered to Hyundai to settle in Glendale, just south of Louisville, was the subject of a great deal of criticism by my informants. They drew attention to the lack of support as they saw it for the fifty-two thousand people employed by the Thoroughbred breeding industry relative to the support available to entice a South Korean company to the region. But most of all they felt that the investment would be inappropriate, as reflected in their rhetorical question, "Why would you bring a

company that wants to build motor cars and put it on land that was intended to make Thoroughbreds?" In 2005, the inner Blue Grass was added to the 2006 Watch List of Most Endangered Sites by the World Monuments Fund, where it was described as under threat from rapid urbanization. Developments that were singled out for disapprobation included the shopping mall built on the site of the historic Hamburg Place, where John Madden bred his champions.[29]

Like Newmarket, the inner Blue Grass is protected by planning policies that are strongly supported by Thoroughbred industry professionals in the town. Some breeders believe that land that should have been preserved at all costs for the Thoroughbred industry has been improperly sold and used for housing and commercial properties by self-seeking local administrators. The development of the monoculture of horse racing was made possible in Newmarket by the purchase of land by the Jockey Club and by the continuing determination of the local authority to preserve the association between Newmarket and Thoroughbred racing. This makes possible a way of life that has been described, with approval, as "feudal" by my informants, who also referred to Newmarket as "a little corner of the eighteenth century in the twenty-first."

Around Lexington, the fertility of the land, combined with its uneven distribution, creates the opportunity to re-create a way of life that had been unsustainable in Virginia. Later, wealthy incomers were attracted by, and contributed to, the economies of scale associated with the specialization of the area in horse breeding. As in Newmarket, the bloodstock industry flourished under tax and land-use regimes put in place by powerful men, many of whom were themselves Thoroughbred breeders. Today, incomers continue to bolster the state's dominance in the industry, attracted by its traditional association with breeding excellence. Despite this, breeders feel that they are not offered the amount of support they warrant from state legislators, often citing the continued ban on slot machines at racetracks as evidence for this lack of concern. This and several other important legislative issues have been adopted by the recently established Kentucky Equine Education Program (KEEP), which has as its mission "to increase awareness of the benefits of Kentucky's horse economy and to promote jobs and economic opportunities for Kentuckians through the Commonwealth's world-class horse industry." KEEP is chaired by Berenton Jones, owner of Airdrie Stud and governor of Kentucky between 1991 and 1995. Its vice chair is Bill Casner, chairman and cofounder of WinStar Farm in Versailles. The protection of the Blue Grass landscape is also a priority of "Bluegrass Tomorrow Inc.," a "regional coalition of business, farming, development and preservation interests dedicated to promoting coordinated growth and preservation planning for the thirteen-county central Bluegrass region of Kentucky." The late John Gaines of Gainesway Farm was

one of the founding members of Bluegrass Tomorrow. Several important breeders, including Robert Clay, owner of Three Chimneys Farm, and Benjamin Taylor of Taylor Made Farm, continue to serve as directors. Don Robinson, owner of Winter Quarter Farm, is vice president.[30]

Like the early pioneers who discovered the state, Kentucky breeders offer strong environmental explanations for the success of their enterprises in the inner Blue Grass. As one newcomer to Lexington told me, "I've bred back in New York State. That was okay. I came here for the land, for what it can give me. What it can give the stock. It's pretty, but I'm more interested in what you can't see. The goodness that goes into your animals. I can pick out a colt that's grown up here just by looking at him. Something about them just looks right." The reaction of this breeder to MRLS was based not simply on loss of revenue but also upon a challenge to his perception of the environment as benevolent at the least, and heavenly at best. As he told me, a year after the crisis had passed, "I nearly moved away. I wept every night for a month when those foals died. Every one of them was a tragedy for me. I came here because of the land itself and I felt betrayed. Everything I told you came back to haunt me."

Despite their faith in the land, the reaction of Kentucky breeders to increased competition from the upstart states of California and Florida reveals an alternative explanation for the dominance of their state over the industry and also its recent (relative) decline. California and Florida have created highly favorably tax regimes for Thoroughbred breeding, and as a result some production has begun to move away from Kentucky. In the past, second-string stallions used to be sent "out west," to begin their careers, to be brought back to Kentucky if they succeeded in producing winners. Recently, horses of the highest quality have been produced, raced, and retained as breeding stock in these other locations. "Florida bred" or "Cal bred" is no longer a marker of lesser status and may even have started to compete with the ultimate epithet, "Kentucky bred." When I raised this matter at an industry meeting I was told that "these tax breaks are distorting the market. Cal bred used to mean a certain thing. Kentucky bred another. Now it's about cost. Not quality. I can't raise a foal for what they spend on two in Florida, for God's sake." Kentucky breeders are currently lobbying for similar measures to be enacted in their state. In this conversation they do not invoke what I had understood to be the innate superiority of the foal produced in the Blue Grass, despite their continual reference to this superiority in every other context.[31]

Thus we see that explanations for the association of Newmarket and Kentucky with the production of Thoroughbreds must take into account a consideration of land ownership and land-use policies in the two places. In Newmarket, land acquisition enabled the Jockey Club to levy a tax for using the Heath and to license trainers.

This preserved a pattern of use that was reinforced by the Town Map of 1958, which remains in force today. As a result, the cultural landscape has been preserved. In Lexington, my informants were eager to explain the success of their region by referring to the unique properties of the land, but a second environmental explanation presents itself. The land of the inner Blue Grass was sufficiently productive to create a strong merchant class very quickly. These merchants were able to consolidate their position on the basis of an uneven distribution of land and owing to the availability of a cheap and flexible workforce—at first African American and more recently Hispanic—a factor that will be discussed in more detail in chapter 7. A combination of home-bred horse breeding dynasties and wealthy international incomers have bolstered this position. The status of the inner Blue Grass as the "cradle of the Thoroughbred" is described as a serendipitous natural connection by my informants; however, it is also a relationship that requires constant management and attention to the social and political context that makes it possible. The next chapter looks in more detail at what takes place on studs in Newmarket and Kentucky.

CHAPTER FIVE

STUD FARM

The best place to observe contemporary ideas about Thoroughbred fertility in action is on a stud farm. My first period of fieldwork was spent working in Cheveley, a village just outside Newmarket, on a stud owned by a businessman who had no interest in racing and visited only once a year. He had bought the farm as an investment and was waiting for the market to improve before he sold it. In the meantime a bloodstock agent managed it on his behalf. The stud had an exalted past but a slightly reduced present. It had stopped standing stallions, as they were considered too great a financial risk for a small and conservative venture where there was no desire for expansion. The stud still owned several good mares, and their yearlings provided the primary income stream at sales time. Other income came from boarding mares either year-round or during the breeding season, to be covered by stallions on neighboring farms. I was a stud hand for four months, working under the stud groom and the manager, and the five other hands. I mucked out, watered, moved mares, foals, and yearlings here and there, but mainly I cut lawns in neat patterns.

The 460 stud farms that surround Lexington range from the prestigious Lane's End, owned by Texan Will Farish, which stands twenty-two stallions on two thousand acres in Woodford County, to more humble establishments housing two or three mares. Many people with whom I worked at the racetrack kept horses at home and produced a foal or two a year. A 2001 survey commissioned by the Kentucky Thoroughbred Association and the Kentucky Thoroughbred Owners and Breeders, based on 150 responses from 460 farms canvassed, found that the average farm was 356 acres and the median number of horses was thirty-four; the average number of employees was twelve, with a median of four. Average net income was $49,789.

These averages conceal vast contrasts, between a large number of one- and two-horse "mom and pop" operations and the few "mega farms" like Gainsborough and Lane's End, some of which form small communities in themselves. Friends from the track who had mares were kind enough to take me with them to view new stallions while they decided on mating plans. In addition, riders from the track took me with them to farms where they were breaking yearlings. "Breaking yearlings"—introducing them to saddle, bridle, and rider—takes place on stud farms in the US and on training yards in the UK. Finally, many stallion owners were excellent sources of information, keen to discuss their ideas about breeding and happy for me to visit their farms and talk to their staffs. This chapter draws upon all of these experiences.[1]

Each category of bloodstock is meaningful to farm owners in distinct ways. Stallions are individuals, commercial propositions, unique opportunities, and huge liabilities. The majority of mares are incomplete halves, made whole by the reproductive process. Some famous mares, including Ashado, sold at Keeneland to Sheikh Mohammed for $9 million in 2005, have pedigrees, racing records, and looks that make them invaluable. These mares were sometimes called "blue hens" by my informants. Foals and weanlings are either yearlings in the making, to be sold at auction to the highest bidder, or potential home-bred racehorses and therefore stallions or broodmares of the future. Studs function as nurseries (for mares and foals) or stallion stations (with mares shipped in from neighboring boarding farms for covering), though the two may be merged on one farm if it is large enough to allow for a degree of separation to be maintained between them. The first of these is an intensely feminine place; the second is supercharged with testosterone. Some farm owners I spoke to are motivated solely by the market, some by the desire to produce the next generation of champions. All would love to combine the two. In the past, breeders like Lord Wavertree and James Ben Ali Haggin were able to adopt specific breeding strategies and to pursue these strategies to the exclusion of any other. As we have seen, this is no longer the case, and breeding decisions are far more haphazard, related to a combination of more immediate, primarily commercial, concerns. These motivations are inscribed upon the bodies of Thoroughbreds, through practices that appear to recast the Thoroughbred as a plastic and mutable opportunity for the creation of capital and other kinds of wealth.

MARES

Whether one is breeding to race or to sell, the basic factor of production for any breeder is the mare. In theory, male bloodlines are open to all on the basis of an ability to pay, although in practice some mare and stallion owners have always failed

to do business with each other because of personal animosity. Access to female lines is severely restricted. Any owner wishing to embark on breeding a racehorse must therefore first find a mare. Unless the stallion owner makes an agreement with the owner of the mare to share the foal, her offspring belongs to her owner. Breeders who intend to build up a broodmare band capable of producing for either the track or the sales often sell their colts as yearlings and race their fillies, selling the duds and retaining any that show ability. Owners attempting to produce both broodmares and stallions retain the best of both sexes, an expensive and risky proposition. The strategies adopted by large-scale owner/breeders have tended to reflect their unique circumstances.

The most famous broodmare band is based in Ireland and belongs to the Aga Khan, who is consistently among the leading breeders in the UK, France, and Ireland; he maintains private studs for his 164 mares and the public Gilltown Stud for his stallions. His stud's logo reads "success breeds success." The founder of this band was the third Aga Khan (1877–1957), who began racing in Edwardian England as the turf entered its "golden age." The third Aga Khan was introduced to racing and breeding by Lord Wavertree, and his first horses were bought for him by George Lambton in 1921. He began buying studs, first in France and then in Ireland, in 1923. The third Aga Khan was advised by Colonel Vuillier, the founder of dosage theory, although some of his most successful matings show that he combined theory with practical necessity and intuition. Whether through good advice or good fortune, the third Aga Khan bought a number of fillies that were not only wonderful performers on the track but also went on to produce talented offspring. Mumtaz Mahal, the "Flying Filly" of 1924, is perhaps the most important example of these "tap root mares" of the modern era, responsible for founding an important family of top-class performers.[2]

The third Aga Khan ran his bloodstock interests on an explicitly commercial basis. He was fiercely maligned by the British media for selling the stallions Blenheim (1930 Epsom Derby winner), Bahram (1935 English Triple Crown winner), and Mahmoud (1936 Epsom Derby winner) to North America. These three were followed in 1942 by Champion Stakes winner Nasrullah, who was originally sold to stand in Ireland but eventually found his way to Bull Hancock's Claiborne Farm in Kentucky. Nasrullah enabled Bull Hancock to enact the international cross he believed in so fervently: between a European champion and his own elite broodmare band. Today, Nasrullah is the prime source of the Phalaris sire line, alongside Turn-To, Raise a Native, and Northern Dancer. These four male lines produced 80 percent of winners of graded (highest quality) races in North America in 1999. They dominate the breed in terms of quantity as well as quality. This dominance is de-

scribed by its detractors (who favor outcrossing in pursuit of "hybrid vigor") as the Phalaris "disease." Phalaris's breeder can truly be said to have been one of the "makers of the modern Thoroughbred." The present Aga Khan has continued this tradition, in particular the concentration on the maintenance of famous families, including that of Mumtaz Mahal.[3]

The maintenance of a large band of mares may not simply be directed at the production of offspring to race or sell. It may also be a mechanism to support the reputations of particular stallions. Claiborne Farm, for example, has been able to breed to mares owned by the Phipps family in order to support the stallions that stand at its public farm. In this way, their stallions have a chance of getting a good performer from a mare that is a proven producer of superior individuals, and they are also represented at the sales. It is likely that a yearling "out of" a mare with a strong record as a producer "by" a first-season sire will be exceedingly popular. The match combines the established quality of the mare with the recent propaganda of the stallion's racing career, plus the possibility that he may produce brilliant offspring in the future. It is not uncommon for a mare with a record of successes with particular male lines to be purchased in order to be covered by the owners of a first-season sire.

Many of my colleagues on the stud concurred with Federico Tesio on the purpose of the mare's existence, believing that the happy mare is either pregnant or nursing, or both. The happy mare is the subject of great attention and speculation, of long hours spent leaning on fences, of extra treats and caresses. Jenny, a stud hand in Kentucky, told me of the sadness of a mare who had aborted her foal the year before: "Lindy was so sad last year; I could see it in her eyes, when she lost that foal. She grieved for the longest time. And now she's all fat and happy again. She hasn't forgotten that little one, but she sure is recovering. She's got a new kind of energy. It's like, this one, this is the one, and it's gonna have all of my energy. She looks great." In accordance with this belief, mares who fail to conceive are pitied, but they are banished to the outer limits of the farm, excluded from the daily routine of the "good" mares. The mares that fail to conceive, "the barreners," turned out in a group with minimal human contact, are outlaws. The barreners are liminal in several senses. The purpose of putting them on the periphery of the farm is partly practical; the more central paddocks are needed for mares with foals, which require more regular attention. However, they are also outside the productive community on the stud, and they may also be literally on their way out of the farm. Their status as part of the community is under review, and either they get with the program and get pregnant or risk permanent exclusion. Depending upon their value, if they fail to conceive for three years in a row they may be sold, retired, or euthanized.

In Newmarket, no one could understand my affection for the barreners, and

colleagues would tell me off for "wasting my time" when I trudged out to see them with a bucket of feed. In the same way, colleagues were also highly suspicious of my affection for non-Thoroughbred horses. When I rode polo ponies (the majority of which were geldings and therefore inconsequential in reproductive terms) in the evening, they teased me about the pony I was riding. It was always too fat, too thin, too big, too small, too ugly, too hairy, too bald, or too common. This was partly related to the fact that they teased me about everything I did, but also because polo ponies are perceived as utterly inferior to Thoroughbreds, to the extent that they might even constitute a separate species in the minds of some. My sense is also that riding was seen as something very strange on the stud, where the purpose of the horses is reproduction. Riding non-Thoroughbred horses that served no reproductive purpose was even stranger than visiting the mares that had been unable to contribute to the annual reproductive cycle on this occasion.[4]

The pregnant mare is not only existentially fulfilled in the minds of Jenny and others who work on the stud; it is also commercially productive. The "empty" mare is both physically and financially barren. The description of mares who failed to conceive as "empty" reflects and reinforces asymmetrical ideas about racehorse fertility, as it implies that the mare does not contribute anything material to the foal, but merely provides an environment in which it might grow. In the absence of veterinary intervention, Thoroughbreds are thought to be every-other-year breeders at best, and so sustaining annual fertility requires intensive management. The defining property of the mare, her fertility, and the end product of the "happy" pregnant mare, accompanied by gamboling foal, looked upon with such affection by my colleagues, is far from being an uncomplicated outcome of what they described as "doing what comes naturally." Ninety percent of mares covered annually now conceive, an increase of 10 percent over the past thirty years. This improvement is due to the emphasis placed upon fertility research by funding organizations within the industry.[5]

One of the most frequently used pieces of equipment on the Thoroughbred stud is the stocks, where a mare can expect to spend some time each week and part of every day between foaling and conceiving. The stocks confine the mare so that the veterinarian is able to examine her internally without getting kicked. They resemble robust starting stalls and this perhaps helps the mares to accept this confinement initially. Routine eventually takes over and most mares enter the stocks without hesitation, perhaps bribed with a mint or an apple core. They are set in an enclosed area where medical equipment can be easily accessed and powered and where good light can be mustered alongside shelter from the worst of the elements. I was fortunate enough to be working at a stud in Newmarket during the breeding season,

which in the northern hemisphere runs from 15 February until 15 July. This is the busiest time for the stud hands, the mares, the stocks, and the vet. The first task I was asked to perform on my first day was holding tails.

The story behind holding tails goes back to the less commercial days of the Thoroughbred when fillies and colts were physiologically distinct, most obviously in muscle pattern. In photographs of the champions of prewar-era racing it is clear that while many colts developed bulging top lines, including crested necks and pronounced muscle formation in the hindquarters, even the most talented mares were longer, rangier, and less defined. As the bloodstock market grew, mares became more commercially significant, and their racing careers became one of the determinants of their value, breeders began to select for masculine qualities in female horses. The intention was to make the female racehorse more like the ideal racehorse, which is male. Eventually, breeders produced the round-rumped filly. The market rewarded breeders for their production, so breeders continued to produce them, to the point that it is now much more difficult to distinguish between colts and fillies at first glance. Some vets and breeders estimate that this change took little more than thirty-five years.[6]

The round-rumped mare is thought to have an advantage over its angular-rumped ancestors, in terms of the primarily male function of racing performance. However, in terms of reproduction the round-rumped mare is severely disadvantaged. While the angular-rumped mare's droppings fall to the floor, bypassing a vertical vulva, the round-rumped mare's now drop from her anus straight onto a sloping vulva. The downside of bulging gluteals is contamination. Contamination results in infection, and infection depletes fertility. The horse, even the non-Thoroughbred horse with the vertical vulva, is conventionally thought of as the least fertile of all domestic animals, with only 50 to 60 percent of mares bred in any year conceiving. (So much for Aristotle's belief that mares could be impregnated by the wind!) Fertility is one of the obsessions of Thoroughbred breeders, because it affects them directly. It leaves them with nothing to sell and with their investment tied up in a high-maintenance animal, an outlaw "barrener." The breeder loses the capital from the sale of the yearling that has not been produced. The mare depreciates, as she would every year, and a barren year increases the rate of depreciation. There is also the worry of getting her in foal next year, and the difficulty of selling next season's yearling when the mare has nothing running for her on the track, and therefore nothing to advertise her reproductive prowess.

The options might appear to be to return to breeding filly-shaped fillies (if any can be found to use as foundation stock), to settle for a lower fertility rate in mares, or to explore the use of new equine reproductive technologies such as embryo transfer. In

fact, at present the solution to the problem of the sloping vulva is the Caslick procedure, or "stitching." This is where my tail holding skills come in. As I loitered in the background, trying to keep out of everyone's way, a young mare was brought into the stocks and stood calmly while the vet injected some local anesthetic into her vulva. I was called over and told to hold her tail out of the vet's way. Much to my surprise, and while I was still ignorant of the developments behind it, the vet, while chatting away to my boss, stitched the vulva shut, leaving a small gap through which it seemed the mare would urinate. The mare was numb and therefore totally oblivious to the activities taking place at her rear. At the time I assumed that this procedure was a last resort for a mare with some kind of hideous disease, and I made a mental note to be extra kind to her when I handled her in future. However, when I tried to find out what terrible affliction had struck her down, I was told that almost all broodmares are "stitched." Even those who do not seem to suffer from infections, or to have a particularly sloping vulva, "just in case."[7]

The Caslick procedure, named after the French veterinarian who first performed it in 1937, is a particularly explicit example of human intervention in the reproductive life of the broodmare. Stitching the lips of the vulva together denies access to the reproductive organs of a mare and echoes procedures intended to protect human female honor. The control of female sexuality has served to reinforce and to reproduce patriarchal structures. In this case, there is a double dose of domestication involved. The mares are bred according to the priorities of their keepers. When the modifications in their form which constitute the fulfillment of these priorities interfere with what they are thought to be able to do naturally, the result is more modification rather than less. Mares that suffer from infections in their reproductive tracts are referred to as "dirty mares," a phrase that evokes moral impropriety and also seems to blame the mare herself for this contamination.

Stitching is just one of the procedures necessary to produce the comforting pastoral sight of a mare and foal every spring. Regardless of their actual dates of birth, all Thoroughbreds share the official birthday of January 1, set in order to make the age conditions of races easier to monitor and enforce. This means that a foal born early in the year enjoys an advantage over its later-born peers, since it will be older when it reaches its "birthday." Left alone, mares foal in the late spring, when the new growth of grass provides a boost to energy reserves and the worst of the weather has passed. As a result, they are most fertile during the summer, the gestation period being eleven months. However, the Thoroughbred breeder wants an early foal that will, in effect, be born in winter, which, in Kentucky at least, is exceedingly cold. In order to produce an early foal a mare will need to be induced to cycle in the winter, usually against its better judgment. This can be achieved in a number of ways.

The earliest technological solution to late cycling was the lightbulb. The lightbulb revolution was borrowed from the factory farm, where chickens kept under lights produced a higher yield of eggs. British breeders tried it first and met with the success that guaranteed that the practice would reach the rest of the Thoroughbred world. Who would have guessed that there was a connection between the lowest-value, most expendable domesticated farm animal and the aristocratic Thoroughbred? This connection is unremarkable if one destabilizes the traditional image of horse racing and breeding as sport, and the Thoroughbred as naturally gifted, and concentrates instead on the commercial production of bloodstock. Mares spend time under lights from late November or early December to create a total of sixteen hours of daylight. By February, their bodies think it's spring and come into heat.[8]

Alternatively, mares can be given hormones to encourage them to cycle at a time that is convenient to the breeder. They are given one and a half cubic centimeters of a combination of estradiol and progesterone for nine days, with a shot of prostaglandin on the last day. The mare should be ready to breed eight or nine days later. Palpation and the monitoring technology of ultrasound have also increased fertility rates. Mares can be palpated through the rectum wall before covering in order to judge ovary size and the condition of the follicle. Follicles of thirty millimeters or more are of ovulating size and are largest the day before ovulation. If the mare does not return to estrus eighteen to twenty days after covering, she is palpated or ultrasounded again to confirm pregnancy. This process is repeated after twenty-five to thirty days and then again at between fifty and sixty days. Palpation reduces the mare's ability to conceal pregnancy. As in human pregnancy, ultrasound has provided images capable of tracking the once mysterious process of conception and pregnancy. It has turned the mare inside out. In this case, however, the equine ultrasound monitors not just the presence of a single embryo but also guards against multiples. Twins or triplets will not be allowed to go full term in Thoroughbreds. Instead, one of the embryos will be "popped" or "pinched." Teasing the vet about his choice of embryo under these circumstances can be extremely amusing. Vets always have good reasons for their choice of which embryo to spare: "the biggest," "the roundest," "the strongest," "the most symmetrical," or as one told me "the best."[9]

The ideal time to cover a mare is during her foal heat nine to thirteen days after foaling, as this way she loses as little time as possible in her nonproductive state. With stitches in her vulva providing a mechanical trapdoor through which her reproductive organs can be accessed, and hormones in her bloodstream which encourage her to cycle in harmony with the rhythms of the yearling market, the mare could be said to be the first of the cyborg racehorses. However, some mares still refuse to cooperate, incurring the wrath of their keepers. As one Kentucky breeder

told me, "Other-year breeders are a bitch, but that's just how they are. And I don't care what you do to them. Sometimes you can do everything right and the mare just won't have it. Mind you, if you are lucky and you get her in foal next year then you better be sure and take care of that foal because that's when you get yourself a stakes winner right there." The idea that a rest year (even when this rest is not chosen but endured) will produce a strong foal recalls Tesio's arguments about energy and reproduction. Stitching, the use of lights, hormone injections, palpation, and ultrasound all reveal the fallacy of the idea of the racehorse as a natural product. All racehorses are perpetually managed. The other moment in the mare's reproductive cycle that epitomizes this fact is covering. First, unstitch your mare.

The first time I took a mare to be covered I was most surprised by the speed of the process. The mare was taken from me on the ramp of the horse van. Her tail was bandaged and genitals washed down. People moved around in the highly efficient gait that is common among people who work with horses, and who still have the voice of their first instructors ringing in their ears shouting, "Don't run!" As I thought that my role was over, I wandered off, but was chivvied back to the shed, the requisite witness. My mare had been "teased" at home that morning, but just to make absolutely sure that she was in estrus an unfortunate pony stallion wearing a leather lap apron was called upon. He sniffed her rump; she squatted and squirted a jet of urine, "winking" and giving all signs that she was ready to mate. The pony was dragged away with the scent of the mare in his nostrils, disappointed once again. Once successfully teased, my mare had felt boots put on her back feet and a twitch applied to her nose. A huge leather collar was strapped around her neck, to protect her from the so-called "love bites" some stallions inflict on their mares. She was then maneuvered into a slight pit in the woodchip floor, where one man held up her front left foot, a technique used to ensure that a horse can't kick out with their back feet. The mare made a pathetic sight, surrounded by four male handlers, "trussed up like a chicken," as one of them shouted to me with glee.[10]

The sight of a stallion is impressive in terms of the obvious threat he represents to the welfare of both the mare and the people involved in the covering. All horses are dangerous, to different degrees, simply because of their size. Colts and stallions are often particularly difficult to handle, because they bite. Some also use their front feet to strike out, in their own style of fighting. The main danger in this context of heightened arousal comes from inexperience, since at first the stallion may not understand what is expected of him and may not take kindly to the interventions of his handler. To reduce this risk, the young stallion is often bred to an accommodating mare before the season begins. A positive early experience bodes well for a straight-forward breeding career, although it can never be predicted what kind of

stud a colt will make, and performance may change over time. War Emblem, winner of the Kentucky Derby in 2001, was a highly aggressive horse in training and was expected to be a virile stallion. However, though fertile, he was apparently not interested in sex. This produced a lot of discussion among my fellow stud workers, most of whom couldn't understand how such an obviously masculine horse could turn out to be such a useless stud. It was made more stunning by its being at a mental or emotional, rather than physical, level: "Okay if he's shootin' blanks, fine, but he gets the job done, right. But it's like he ain't even interested! I mean what kind of a sonofabitch is he?" Stallions exhibit a wide variety of breeding behavior. Some need encouragement; others need to be subdued. Some are always ready; others are what is called "slow breeders" and may take some time to become aroused, particularly during the busiest part of the season, when they may be expected to cover three mares a day.

The stallion scheduled to cover my mare was an old pro, and he jogged into the breeding shed, having followed a familiar route that alerted him to what was to come, part of a routine that is designed to ensure arousal and therefore quick turnaround. He shrieked, and the mare struggled to turn around to see what was behind her. Without so much as a sniff to inspect the mare, he reared up and landed on her back. Under different circumstances, stallions would be circumspect of mares, ready to be seen off with a kick if she was not in heat; however, hand-bred stallions know nothing of foreplay or rejection, the teaser's job. They are literally one-trick ponies. The tail man directed the stallion's penis into the mare, who braced her back legs to support the extra weight. The reason for the pit became clear, as the stallion was somewhat shorter than his mate. The stallion took no more than ten seconds and three thrusts to ejaculate, signaled by the fanning of his tail and the exhausted slide from the mare's back. This is a dangerous time for the stallion, as some have been known to pass out from their exertions, but this one stood firm for a second or two, then blew his nose. His deflated genitals were splashed with a bright blue disinfectant solution before he was led meekly out of the barn back to his box. My mare was unshackled from her various restraints and handed back to me. Someone in the barn shouted, "Next!" We were no longer the focus of anyone's attention and we trailed off to the van. The production line ground on in our wake.

Covering mares on the scale I witnessed in Kentucky and Newmarket is not elemental or stimulating but, rather, mechanical. The process has been drained of every accompanying uncertainty until all that is left is copulation in the expectation of conception. Artificial insemination is banned by the rules of Thoroughbred racing, but to some of my informants a covering is now nothing more than artificial insemination without the intervening collection of sperm and its redistribution

through a syringe. Stud hands are quite aware of this change in rhythm, telling me, "You do that many mares a day or a season, and you end up with this production-line vibe." Another felt that there was "no time to let nature take its course. All you're doing is bringing the reproductive organs into contact with each other. It's very clinical. I always think of that when I see some guy's hand guiding that stallion in there. They don't even do that part for themselves any more." In 1978, the "books" (the number of mares a stallion is booked to cover in a season) of the top ten stallions in Great Britain and Ireland varied in size between 34 and 64. In 2001 they had increased to between 57 and 219, and this trend has continued: in 2004 the average book of stallions in Kentucky was 54. AI has been rejected partly on the basis that it would lead to a sharp increase in the number of offspring produced by a particular sire, but this increase has already been achieved to some degree through developments in reproductive technology. The increasing number of mares covered by stallions in a season is a result of pressure from the market for stallions and yearlings, and the connections between them. As books peaked in 2005, new concerns were voiced, of overproduction and falling demand.[11]

STALLIONS

The femininity of the nursery is complemented by the male space of the stallion station, or "sperm bank" as it was called by my informants. The National Stud was the first stallion station in England, intended to serve the interests of UK breeders as nominations became increasingly expensive and many of the best stallions moved overseas. The stud was established by the donation of Lord Wavertree's bloodstock to the nation. It moved from Wavertree's farm in Tully, County Kildare, to Sandley Stud in Dorset following the outbreak of the Second World War, and from there to a purpose-built stallion station in Newmarket in 1966. The role of the National Stud is to prevent English-bred horses from being sold abroad and to offer these stallions at favorable rates to UK breeders. However, it has never managed to compete with American or Irish breeding concerns because of unfavorable tax regimes, and currently it stands nine moderate stallions. The stallion station has been perfected in Ireland, Japan, and the US. The most impressive and professional of these outfits now stand up to forty stallions. The Irish breeding organization Coolmore stands nineteen at Ashford Stud near Versailles in Kentucky and twenty-one from its base in Ireland. Sheik Mohammed Al Maktoum stands forty-eight stallions at eight studs worldwide, including ten at Jonabell, their Blue Grass base, and thirteen at Dalham Hall near Newmarket, all under the banner of the "Darley" organization. The Shadai Stallion Station in Japan stands forty. Stallion stations may be either purpose

built on existing studs, or on new land, since they do not require the mythical properties of land used to raise foals. The buildings used to house stallions in the US are impressive, though modern, and their impact dims in comparison to the palatial royal stables at Chantilly, or any of the more ancient stables one might encounter in Europe. Stallions do not require much space, just paddocks, stables that allow them to be segregated from one another, and a barn or two in which they can perform the function for which they are kept.

The stallion is the most valuable category of bloodstock. Fusaichi Pegasus, for example, winner of the 2000 Kentucky Derby, was sold by his owner Fusao Sekiguchi to Coolmore for a reported $60 million in 2001. Expenses such as these demand a return, and without any idea of what kind of foals Fusaichi Pegasus will produce, Coolmore was gambling, on the basis of the favorite principle of the racing fraternity, that like will beget like. This seems the obvious explanation if the function of a stallion is understood to be the production of foals. However, once the operations of the bloodstock market are understood, it becomes clear that this is not the sole function of a stallion. Stallions can be incredibly useless at reproducing themselves and yet be successful as a result of the conventions that structure their exploitation. This feat is achieved by advertising in its broadest sense. To the modern stallion manager, racing is not just a test of the breed, or even a gambling medium, but also a prolonged advertising campaign. The contemporary popularity of breeding theories such as dosage, which concentrate on the contribution of the stallion at the expense of that of the mare, depends upon this, the current orientation of the yearling market.

Racing is an international sport, and various regions vie for dominance both on the racetrack and in the breeding shed. Influences, in the form of breeding theories, technologies, and the stallions themselves, have passed from more established nations to their competitors and back again. While the fortunes of European studs have waned, new pretenders have emerged on the scene. Before 1945, the axes of competition lay between England and France and between Europe and the New World. More recently, changes have become more rapid and have involved much more varied constellations, including the Far East. This state of affairs, having developed through improvements in transport and communication, can also be traced to the influence of a small group of people over the specialized world of Thoroughbred racing and breeding. During the 1970s and until 1986, racing in the US provided a tax shelter, creating increased demand for racehorses, any losses from which could be written off against taxes. Conversely, capital gains made on bloodstock and purses won were subject to tax. In the UK, the situation was the reverse; racing was seen as a hobby and therefore not tax deductible, leaving any profit untaxed. The likelihood

of a profit in the UK was greatly reduced, however, by the liability of bloodstock transactions to value added tax (VAT), the presence of legal bookmakers, the relative weakness of the Tote (racing's pool-betting enterprise), the tax on bookmaking (returned to the treasury), and the meager levy (raised on bookmakers' turnover and returned to racing). In Ireland, duty on the sale of stallion seasons was lifted by the prime minister, Charles Haughey, in 1969, leaving the UK at a further disadvantage.

The opportunities offered by tax regimes favorable to the bloodstock entrepreneur at this time were spotted by Robert Sangster, heir to the Vernon's Pools fortune. He hatched a revolutionary plan, a change in thinking that marked the final passing of the old ways of the owner-breeder, who would breed for pleasure and race for sport. As his biographer explains, Sangster decided to make breeding pay, by buying baby stallions, an idea developed by his adviser, Irish stallion manager John Magnier. Sangster's plan was to buy potential stallions, with pedigrees that held international appeal, as yearlings. These yearlings were to be sent into training at Ballydoyle in Ireland with one of the most respected trainers in the world at the time, six time Epsom Derby winner Vincent O'Brien. Following winning racing careers in the European Classics, plus careful promotion, they would either be sold back to the US, the strongest bloodstock market in the world, or stand at Coolmore Stud in Country Tipperary, where Sangster and his associates would reap the benefits tax free. The prototype for the scheme was Nijinsky, a Northern Dancer colt bought by Vincent O'Brien for Charles Engelhard at the Woodbine Sales in Toronto in 1968. Nijinsky was bought for $80,000 as a yearling and syndicated by Bull Hancock at Claiborne Farm in Kentucky two years later for $5,440,000, having earned over £250,000 in prize money. He went on to sire champions including Golden Fleece, Caerleon, Royal Academy, and Lammtarra.[12]

Sangster applied the principles of bookmaking to breeding. He had entered into bookmaking through the family firm, so it is no surprise that he knew that the way to make money was to run the book. To do this, he set about buying a number of yearlings that would spread his risk. If Nijinsky could increase in value by seven times during two years, then only one in seven of the yearlings he bought would need to be successful in order to pay for the other failures. In betting terms, he was hedging. By the time of the three-year-old season of the yearlings that Vincent O'Brien had chosen in North America, Sangster was leading owner in Britain. Champions The Minstrel and Alleged had both turned into exactly the kind of stallion prospects the group had set out to acquire. Their plan became a blueprint for making Thoroughbred breeding commercially viable.

Sangster and his associates arrived on the bloodstock scene at the same time as the Maktoums, the ruling family of Dubai. The Maktoums may have arrived at the same

time as Sangster, but they harbored very different ambitions. The racing industry speculated that the Maktoum brothers would become latter-day owner-breeders in the style of Lord Derby and Lord Falmouth. In fact, the strategy of Sheik Mohammed, at the forefront of the family's entry into British racing, was much more complex. As the finite oil reserves of his country dwindled, he wanted a successful international horseracing program to act as an advertisement for Dubai as it was launched as a prestigious tourist and business destination for wealthy Westerners. The association fitted perfectly with the brothers' enthusiasm for the sport, their desire for diplomatic and business links with the West, and with Sheik Mohammed's keen appreciation of the Thoroughbred horse and its history.[13]

The effect of the Maktoum presence, alongside the Irish interests, was explosive for the bloodstock world, and the market was reshaped in accordance with the priorities that Sangster had first devised. The Maktoums spent £27 million ($46.7 million) on yearlings in 1982 and £50 million ($86.6 million) in 1983. By 2000 it was estimated that they had spent more than a billion dollars on all kinds of bloodstock. The average price of a yearling at the Keeneland Select Sale rose from $53,000 in 1974 to $600,000 in 1984. At Tattersall's Houghton Sale the average price over the same period rose from 5,200 guineas ($10,123) to 93,000 guineas ($181,059). The market peaked in 1984, when Sangster and the Maktoums agreed to stop bidding against each other and the bubble burst. Sangster and various partners (in the guise of Coolmore) and the Maktoums had made sufficient investments, in mares and yearlings, to enable them to establish themselves as competition to the Thoroughbred establishment of the Blue Grass. Although both parties continue to buy yearlings and broodmares in the commercial markets, they also sell Thoroughbred nominations to the stallions they have bought and bred. As well as its original farm in County Tipperary, Coolmore now owns studs in Australia and Kentucky, each standing stallions commanding the very highest stud fees in the world, while the Maktoums own thirteen farms in England, five in Ireland, and four in Kentucky.[14]

During a ten-year period, between 1974 and 1984, the bloodstock industry changed forever. My informants remembered this as a time of excess and unnatural profits, particularly in Kentucky. Personal honesty was tested to the limit by the promise of back handers, big money, and favors. As one bloodstock agent told me with relish, it was a time when "all the tarts came out of the cupboard." Middle men handling stallion nominations, which became like bargaining chips in an international Dutch auction, were particularly well served. Stories of moneymaking and dealing were, to my informants, quite thrilling, especially if they involved illegal activities. Many included a phone call that made a million dollars. One Kentucky-based British bloodstock agent told me, "Made a phone call Friday night. Saturday morning I was a

millionaire! Those were the days!" The inflated paper value of rights to a covering was underwritten by the abnormal returns generated by yearlings, which were in turn syndicated as stallions, whose shares were in turn inflated, and so on. However, when everyone had increased their liabilities, overextending themselves on the basis of selling either stallion shares or yearlings, and the bidding wars stopped, people found that their wealth was nonrealizable—imminent but caught up in a chain of similarly foundationless deals. Studs collapsed, most memorably the famous Calumet Farm, which disintegrated under the guidance of Ted Lundy, following the death of Alydar, a stallion against which large debts had been guaranteed in 1990.[15]

Although the thirteen-million-dollar yearling of the mid-eighties has disappeared, the principles of the bloodstock market put in place by Sangster remain. The stallion is the most important link in the bloodstock chain, and the entire life of a particular horse before it reaches the breeding shed can be seen as an extended advertising campaign. If people are convinced of the value of a horse, or if breeders are convinced that buyers of yearlings are convinced of the value of a horse, then it can command a high first-season fee. Breeders know that his yearlings will attract attention in the auction ring. The advantage of this is that the horse can overcome the time delay of not having runners until two years after it has been retired to stud. The other advantage is that if the horse is not very good at producing winners this will not become obvious until a couple of generations of his offspring have run, by which time stallion owners will have made good their investment. The long-term value of the stallion still lies in the quality of his get, and the majority of stallions have no long-term value, since most will fail to reproduce offspring of anything like their own quality. The short-term commercial value of a horse rests on its pedigree and racing reputation and the fee it can command in its first two years at stud as a result of this reputation. Even in the nineteenth century the loss of a match race was related to a loss in potential earnings as a stallion by its owner. However, the difference today is that a horse will be campaigned over certain distances and under particular conditions that are thought to attract mare owners and yearling buyers to its stock well before its retirement from the track.

Stallion advertising is not a new phenomenon either. In 1788 the *Kentucky Gazette* (when it had only been published for six months) contained the following: "The famous horse Pilgaric, of a beautiful color, full fourteen hands three inches high, rising ten years old, will stand the ensuing season on the head of Salt Rover at Captain Abe Irvins, Mercer County, and will cover mares at the very low price of ten shillings a leap, if the money is paid down, or fifteen at the expiration of the season; and twenty shillings the season in cash, or thirty shillings in good trade." Advertising campaigns for stallions now include glossy brochures containing spectacular images

and videos set to rousing sound tracks. The potential stallion's career begins at the sales, when the price he reached as a yearling becomes the first of many selling points to be exploited later as he is marketed to the mare-owning public. Potential stallions must have fashionable breeding on both the male and female sides. They will run in races that advertise whatever qualities the market demands: at the moment this is speed, and races over short distances are better stallion makers than are tests of stamina. They also run in far fewer races than their predecessors. I was told that, when developing a stallion's career, "the worst thing you can do is to get him beat." The careers of potential stallions are planned with reputation in mind. They will not run under conditions that do not suit them. If they fail to sparkle in a race, then an excuse will be found that does not affect their stud value. Trainers and jockeys who work for big breeding concerns are adept at promoting their charges to the various markets that will buy their progeny, providing brochure-ready sound bites.

Stallions are also producing more wealth by covering more mares than in the past. Until the 1970s, a stallion would be syndicated into forty shares on the basis that he would be assigned a "book" of forty mares to cover in a season. These seasons could be sold or traded, but the stallion was thought to be able to handle forty mares, the market forty yearlings. But as fertility rates have improved and fewer coverings are required, the number of mares that can be covered has increased. At Coolmore's studs, where this strategy was devised, large books are the policy rather than the exception. In 2005, Lion Heart, a first-season sire standing at Ashford in Kentucky, covered 233 mares in one Northern Hemisphere breeding season, setting a North American record. Chapel Royal, also a first-season sire, was second on the list with 222 mares covered. The six stallions with the largest books were all based at Ashford. There was a time when the hundred-mare mark was seen as the absolute limit to which a stallion should be subjected during the 150-day breeding season, but in 2005 in North America 126 stallions were asked to cover more than this. This was described to me as the "three-jumps-a-day policy," or "more jumps than you have hot meals."[16]

Many of the breeders to whom I spoke are against this kind of "overbreeding." Some objected on the grounds that they believed that a good covering with a greater quantity of ejaculate and higher concentration of sperm will result in a better foal. To others this was a welfare issue, couched in the particular idiom of dignity that the Thoroughbred is able to command. One Kentucky mare owner told me, "I think it's completely unnatural. You know the fastest way to make a stallion savage is to overbreed it like that. Or breed it to a mare it doesn't want anything to do with. These are sensitive creatures and what they're doing is wrong. It's all wrong for the horse. It's

all about greed, and how much you can screw out of a horse in the shortest possible time, because that's all they're interested in." To other mare owners, overbreeding devalues the stock of that particular stallion, and I was asked, "Why would you go to this horse? I mean you send your mare to him and you nurture the foal and you plan for the sale and get him ready and then you turn around and there are ten or twenty others all cataloged to sell alongside yours. What's the point of that? You're in a competition within a competition. There's no scarcity value in any of these stallions at all."

Overbreeding is closely associated with first- and second-season sires, the choice of sire with the greatest risk element. Breeding to a first- or second-season sire offers a small chance of a huge reward, relative to the more predictable but consistently lower returns of breeding to an established sire. First-season sires are bred to in the hope that the breeder will find that the sire has been underpriced and the market really likes the horses. Second-season sires are bred to in the hope that the first-season crop of the sire will come out and blow people away on the racecourse, inflating the value of his own stock. Traditional breeders are skeptical of this high-risk strategy. Their question was "Why go to a first-season sire when you can go to something for $15,000 and know you are going to get a runner? The only reason is fashion. You can see what's going to be hot. [Depending on] what it's done and who is taking care of it, you know. Are they going to look after it at the sales? Hell, of course they are. This is the short term again—breeding just for the market. Some of these sons of bitches don't even look at these studs. I mean they might be the crookedest sons of bitches you ever saw, but you bet your life they sell. That's a young man's game."

The incentive offered by the bloodstock market to stallion owners has led to a number of changes in the way racehorse fertility is exploited. The first of these changes is in the racing career of the horse, which must be based upon what constitutes a logical commercial trajectory for a given horse during the two years of its racing life. The stallions of today run far fewer races than those of the past; Man O War ran twenty-one times in the 1920s, Kelso ran sixty-three times during an eight-year career in the 1960s, Citation ran forty-five times in the 1970s. Seabiscuit, running in the forties, made a heroic, and now unthinkable, eighty-nine starts, and as a result he developed a huge following among the public. Today, each race is selected on the basis that it will enhance the profile of the horse as a potential stallion. While horses used to be selected to stand as stallions on the basis of their performances on the racecourse, they are now potential stallions before they reach the track. The dominance of a market that depends upon pedigree to determine the price of a yearling will rarely allow a poorly bred horse that has been a great performer on the

track to break into the stallion ranks. This is one of the reasons why it was such a tragedy that the great North American horse Cigar, winner of nineteen races and $9,999,815 in the 1990s, turned out to be what my informants referred to as a "Jaffa" (infertile). It would have been fascinating to see what the industry made of a horse with obvious ability but a slight pedigree in the auction ring. Instead, his fate initiated a discussion about cloning. The dominance of certain sire lines means that the industry already has a very clear idea of what the pedigree of a stallion should be. The races these "baby stallions" take part in are thus an early part of their careers as stallions. The initial stud fee will be determined by the success or failure of their management.[17]

Once a stallion has established its reputation on the racecourse, there seem to be no limits to the numbers of mares it might be asked to cover in the breeding shed. Furthermore, sufficient demand for their product means that stallions can take up their duties in both hemispheres, "shuttling" between the two in order to cover mares during both breeding seasons. These factors will maximize the short-term earning potential of the stallion and insure its owners against the possibility that it will prove to be a failure at the actual business of producing valuable offspring. If, like Sadler's Wells or Storm Cat, they turn out to be good at being stallions, these strategies can be maintained. Even if the horse turns out to be a failure in terms of producing good racehorses, then it has turned a profit before this was known. It can have its nomination fee reduced until it is no longer viable, at which point the horse can be exported to a younger racing nation to try again, or be retired.

YEARLINGS

Mares and stallions are assessed according to different criteria. Mares with wonderful pedigrees do not necessarily need to be able to perform on the racetrack themselves in order to be valued as bloodstock. Even mares who are moderately bred and have had undistinguished careers are often "given a chance" in the breeding shed. The relationships between ability as a racehorse, pedigree, and quality of offspring are de-coupled in the mare. Stallions, with very few exceptions, must both perform and have commanding pedigrees in order to become serious contenders to reproduce. The only exception to this rule may be a well-bred colt who was injured early in his racing career—for example, Kylian (UK)—or the unfashionably bred colt who performs way above expectations—for example, Silver Charm (USA). The relationships between performance, pedigree, and ability of offspring are tightly maintained in the selection of stallions. Thus a small group of elite males covers a

large group of females of mixed ability and pedigree. The production of yearlings is currently subject to two distinct idioms of heredity, one male and one female.

Foals reach their greatest commercial potential as yearlings. Weanling sales do take place, when these awkward-looking, long-legged, hairy creatures are paraded in the ring and sold to people who believe that they can exploit the value between the foal market and the yearling market. These people are known as pinhookers, and they have nerves of steel. Most weanlings are retained, to be prepared for sale as yearlings. They may be prepared on the stud where they were born or taken elsewhere, to a stud that specializes in providing these services. Yearling preparation has become controversial as the pressures of an increasingly lucrative market have rendered traditional methods obsolete. As prices soared during the 1980s, a new kind of super yearling was in demand, one that would require only the smallest leap of the imagination to be pictured as a mature racehorse. In particular, yearlings had to have straight limbs, described as being "correct."

Big, sleek yearlings are produced by high-protein, high-carbohydrate diets, confinement, medication including steroids, surgical intervention, therapeutic shoeing or trimming of feet, and forced exercise (which may include the use of inclined treadmills). Most breeders told me that they felt that the big yearling was a bad thing and that they did not want to produce that kind of animal, but that their competitors were all intent on producing big yearlings for the market and had only one thing on their mind—money: "People seem to want big animals today. But I won't force a baby like that. These are just babies. I walk mine in hand and that makes a lot of difference. We wouldn't have treadmills on the place. But you'll see them in other places. They'll say they can't afford people to walk them, but what they want is muscle, you know, mass, top line." Walking in hand is regarded as natural, whereas using a treadmill is unacceptably artificial. Walking is made necessary by confinement and by the need to train the horses to be pliable by the time they have to be shown to potential buyers at the auction.

Certain elements of yearling preparation have become accepted, while others, including the use of steroids, remain controversial. One breeder told me that she gave steroids to her yearlings not to change their muscle mass but rather to encourage their appetite, which was a natural instinct. To her this was enhancing nature, or allowing a yearling to fulfill its potential, and should not be confused with changing nature, which she opposed. "It's just helping that little filly find herself. She will never be anything if I leave her to just grow up but not really fill out. Now what if I give her Winstrol and she picks up and gets strong and starts to catch up with her little friends? Now you don't have a problem do you? Because she always had it in

her, and sometimes this can bring out what's in them, especially the fillies. Then you back off it again. You have to give her a chance of reaching her potential." Some of my informants told me that these yearlings were not as robust as their outward appearance suggested. A female bloodstock agent and journalist pointed out a particular yearling at a sale we were attending and said, "See that one? Put a saddle on it and ride it away. It could be a two-year-old, couldn't it? Well now that might be even a little too big for the folks here. But I'm telling you someone will want it. I've seen them taken home and put in a paddock and just fall apart. You put them in a paddock one day and they look a million dollars; come back the next day and it's all fallen apart." This woman described these yearlings as "overdomesticated."

Many breeders and trainers told me that they did not breed or buy big yearlings but that big yearlings are bred and bought by everyone else. Faced with a vast number of shiny mini-racehorses and a few small, hairy interlopers, it seems difficult to imagine anyone picking the so-called "ponies." The normalizing effect of the sales preparation is that people see the prepared yearling as typical and the unprepared yearling as a runt who, despite the best efforts of the same techniques, is small and unfurnished. It suggests that the natural talent that has been set free from the others courtesy of a "proper" preparation must have been lacking in the small yearling. Traditional breeders despair, but they have no choice but to follow the trend: "People buying horses today are looking for a correct animal. I'll tell you the crookedest mother of all can straighten up pretty good when it's in the winner's circle. I've seen animals we couldn't sell to the circus come good, with legs all which ways. But don't take that to the sale. People will think you're crazy! The sale's a beauty contest. Hasn't got anything to do with racing. Sometimes it's the ugly duckling that comes good; sometimes it won't. But you just can't tell by looking. Can't see their hearts from the outside!"

The relationship between straight legs and performance is unproven. In fact, it is the opinion of surgeon Wayne McIlwraith that "a perfectly straight leg is not ideal for soundness." Unsurprisingly, therefore, recent research has suggested that some forms of corrective surgery may even contribute to unsoundness. Nevertheless, "correct" yearlings remain at the top of every farm manager's wish list. Buyers look for correct yearlings on the basis that (in theory at least) they will place equal strain on each of their limbs when operating at speed, thus minimizing the risk of injury. As I was repeatedly told, "There's no such thing as a correct foal." There are, however, more and less forgivable faults, and managers of young stock must prioritize improvements accordingly. Angular limb deformities can be straightened by a combination of surgery and corrective trimming or shoeing of the young horse's feet. Toeing out is corrected by "stripping," pulling back the edges of the periosteum, the

tissue that protects the bone, to stimulate the side of the growth plate that has fallen behind and caused the asymmetry. Knock knees are corrected by the insertion of screws, wires, or staples that retard growth on the side of the plate that has raced ahead. Many of my informants assured me that although many of the horses I saw at the sale would have experienced some degree of corrective surgery, the effects were far from predictable and could even create other more serious problems later in their racing careers.[18]

The offspring of one of the most famous and most commercial sire lines is a significant exception to the "correct" rule. Crooked legs are the desirable norm for offspring of these sires, to the degree that some agents prefer those offspring that have them. This begs the question of the relationship between correctness and ability, since it may not be the crooked legs but an associated trait that confers advantage. Even so, it is interesting to examine such an exception. Stallion prepotency is the principal guide to action in this case, and it overrides any more general rule of what good conformation may or may not be. Faults are relative to particular stallions, as I discovered when I inspected yearlings with agents for whom resemblance was evidence of the heredity that they were looking for. They wanted to see resemblance, and occasionally did so, turning to me and saying, "Wow. He looks like his Daddy, don't he?"

Resemblance overrides any abstract notion of correctness and offers another explanatory factor in the preference for the intensively prepared yearling. A degree of resemblance is achieved by producing a yearling that could pass as a mature racehorse. As one unabashedly commercial Newmarket breeder explained as we wandered around a sale at Keeneland, "Buying a racehorse is a gamble, right? The closer you get to something that could run, the more likely the agent can make that jump too. And whatever you say about the agents, you can say double about their clients. Most of them have little enough idea about things—much as they think they know. I don't care what you say about . . . [steroids] and treadmills. And all this bitching. You want natural yearlings? Don't feed them! Don't bring them in! Don't trim [their feet]! Don't worm them! Then try and sell them! Are you kidding me?" This breeder attacked what he saw as the double standards of those of his colleagues who were more reticent about yearling preparation, and he went on to tell me, "We live in a cybernetic age and the racehorse is too. I got Terminators right here! What was the best horse I ever bred? The one I sold for most. Period."

PRODUCING THOROUGHBREDS

On my first visits to both the Blue Grass and to Newmarket I was struck by the old-fashioned appearance of the stud farms: they seemed caught in a time warp. My

informants encouraged this impression by referring to the historical claims to specialism made by both regions. Some of their buildings are indeed ancient, as in the case of Cheveley Park in Newmarket. Others are re-creations of established designs, as at Jonabell in the Blue Grass. Their buildings make use of traditional materials, including wood, brass, gravel, and lawn in Newmarket and limestone in Kentucky. In both places the emphasis upon the appearance of the outer perimeter of the stud as well as its interior reflects a class structure that made such "spit and polish" possible in the Edwardian and antebellum eras, respectively. White post-and-rail fences, for example, require constant maintenance by people who, on the largest stud farms, may be employed to do little else. In Kentucky, the physical environment in which the Thoroughbred is produced deliberately evokes the plantations of the past. However, what takes place on these farms is far from static or timeless.

As Varola wrote, the kinds of Thoroughbreds produced—and, one might add, the techniques employed to produce them—reflect the priorities of the time. In the past half century, Thoroughbred reproduction has been enhanced to such an extent that feats that were once thought possible only through the mechanical technique of artificial insemination are now achieved "naturally," or at least in and through the bodies of the horses themselves. The practices I have described in relation to the bodies of mares and yearlings in particular are indicative of the commercialization of breeding. Commercial considerations have always been part of racing. They influenced Thomas Darley's decision to import an Arabian stallion to the UK, and they encouraged John Hoomes to bring Diomed from the UK to the US in 1798. However, when oil wealth from the Middle East collided with the cunning of Robert Sangster, a British businessman, the scene was set for the rapid transformation of an industry that had fallen behind the times. In the past fifty years, the bloodstock industry has changed in the same way racing did in the nineteenth century with the impact of bookmaking. What was once an interaction between people known to one another has become, for some, a highly profitable business. The interesting part of this endeavor is the determination of some to retain the trappings of a Corinthian tradition in what has become a fiercely commercial world. The next chapter reveals the effect of this combination of amateur idealism with cut-throat competition in the arena where rivalries between competing interests are best displayed: not on the racecourse but in the auction ring.[19]

CHAPTER SIX

AUCTION

Thoroughbred auctions are tremendous entertainment, and they take place in some beautiful settings. Keeneland has perhaps the most beautiful pavilion of all, with a copper roof, green seats, and a rural setting among cherry trees on bluegrass. The auction takes place on a raised stage, lit up by spotlights, before an audience, and is structured by a unique set of (mostly unrecorded) rules: it is pure theater. This point was reinforced when I sat and watched preparations for the biggest sale I had attended to date at Keeneland. What took place was a rehearsal for the performance that evening. Horses of different colors were brought onto the stage and the lights were adjusted accordingly. Chestnut, gray, and brown ponies borrowed from the track, looking utterly incongruous and shabby, were led from backstage to make their entrance. Men fiddled with angles and filters until each of them sparkled. Some of the ponies attracted bids from the audience of stand-ins and the electronic bid board was tested to capacity. The highest price I ever saw at Keeneland was for a little brown pony taking part in a rehearsal.[1]

The auctioneer, the only voice that addresses the audience, conducts the sale in a patter that takes some time to understand. In the UK, an ordinary speaking voice is used by the English and Irish auctioneers, though the phrases they use are conventions that must be learned. In the US, auctioneers use a singsong dialect that further isolates the Thoroughbred sale from other kinds of exchange. The trips and falls of the auctioneer are strange to the ear and impossible for the uninitiated to understand. As in the UK, certain phrases are meaningful and give signals to experienced bidders in the audience, including whether the reserve price of a horse has been reached. In both places, bids may be taken from outside the auditorium, so although

the auction takes place in public and is presented by participants as transparent, its conventions ensure that it is sometimes impossible for people to see who is bidding. This is simply the most obvious obfuscation in a market that embraces ambiguity.

The bloodstock auction is an event which has rules that are known to many, but not all, of its participants. In recent times, this aspect of the auction has attracted criticism from the racing press and from individuals who have been exploited by an uneven distribution of knowledge. What some see as the corruption of the auction is an essential part of its attraction to many others. The auction is a game, or a sport, as is racing, and many of my informants were highly reluctant to see either stripped of its moral opacity. One of the prime attractions of racing, breeding, and bloodstock auctions to participants is that such competitive activities create and enact distinctions between people who are otherwise similar.[2]

The yearling market, which takes place several times a year in Lexington and Newmarket, is considered to be the "bellwether" of the industry, the market that best reflects the health of the industry as a whole. It is also the most exciting and valuable market, with the greatest impact upon stallion fees. Yearling sales take place in the autumn and follow a circuit that takes in Tattersalls in Newmarket, Goffs in Ireland, Deauville in France, and Keeneland and Fasig Tipton in Kentucky.[3] Mare owners selling yearlings, bloodstock agents, and buyers come together on this circuit. Mare owners have spent the summer preparing their yearlings for sale and getting their mares back into foal. Buyers have been racing last year's purchases and perhaps even nurturing stallions of the future on the racecourse. Come the autumn, and the end of the flat season in the Northern Hemisphere, the action moves to the sales pavilion.

TATTERSALLS AND KEENELAND

In England during the eighteenth century, several firms of auctioneers held regular sales of racehorses in London at Hyde Park Corner. The first was Beevors, founded in 1753, coinciding with the genesis of the Thoroughbred and the creation of the General Stud Book. In the 1770s Beevors became Aldridges. These firms were a far remove from the traditional Smithfield horse traders. They were distinguished not only by the function and quality of their stock but also by the aristocratic pretensions of their personnel. This was one of the means by which they reinforced their separation from mere horse traders and the moral suspicion associated with them.[4]

Richard Tattersall (1724–95), the founder of the Tattersalls bloodstock dynasty, was employed by Beevors before he became stud groom to the Duke of Kingston. Tattersall married Catherine Somerville, granddaughter of the Twelfth Earl of Somerville. For some time, Richard's son Edmund sold racehorses on a piece of land

behind Queensberry House on Newmarket High Street, and in 1884 he purchased their present site, Park Paddocks, just off the Avenue. Somerville Tattersall (1863–1942) was the last member of the Tattersall dynasty, and upon his death the business passed to his partners, Gerald Deane, Robert Needham, and Terence Watt. In 1957 Tattersalls decided to concentrate all of its business in Newmarket, giving up the Doncaster sales, now run with some success by a rival firm. Their offices were moved from London to Newmarket in 1977. The move was pivotal in securing the place of Newmarket as "HQ," as the exchange of bloodstock is one of the triumvirate of activities (alongside racing and betting) that combine to create the racing economy.[5]

Tattersalls or "Tatts," as it is known within the industry, is the premier sales company in Europe, attracting the best-bred yearlings and the wealthiest clients, though its fortunes have been eclipsed somewhat by Keeneland, the North American giant. Tattersalls retains much of the old-world charm of the agricultural scene that breeding racehorses presumably used to be a part of. It is the bastion of the flat cap, for example. And just as Newmarket is, according to its strongest defenders, "traditional," Tattersalls preserves some of the finest traditions of its earliest founders. It continues to sell horses in guineas (units of a pound and a shilling), for example. The shilling was once the auction house's commission, but rates are now variable. The preservation of an esoteric system of valuing horses serves as one of the means of establishing the distinctive qualities of this trade, outside conventional commerce. Tattersalls was slow to adopt the revolutionary changes embraced by the North American auction houses, including endoscopy and the X-raying of yearlings, and missed out on some remarkable paydays as a result.

Keeneland began life as a racecourse and held its first auction of Thoroughbreds in 1938, selling thirty-one lots for $24,885. Top lot was Marmitina, a nine-year-old mare with a colt foal at her side, sold for $3,500. The first yearling sale was held in 1943 when Kentucky horsemen could not afford to transport their horses to the premier sales of the time, conducted by Fasig Tipton at Saratoga Springs in New York State. Fasig Tipton, who had been selling Thoroughbreds since 1898, from a headquarters in Madison Square Gardens, ran the show. At the first yearling sale, 312 were sold for $929,880. Since that time, Keeneland has gradually established itself as the major player in the North American Thoroughbred auction business, eroding the dominance of Fasig Tipton. Keeneland is now a combined training, auctioneering, simulcasting, and racing complex, run by a non-dividend-paying corporation that distributes its profits as prize money (called "purses"), to improve the infrastructure of Keeneland. In 2005, Keeneland contributed over a million dollars to ninety organizations throughout central Kentucky, bringing the cumulative total of donations since the founding of Keeneland in 1937 to over $13.8 million.[6]

The spring and fall meets attract punters and horsemen with some of the best racing in the country; however, Keeneland posts its most impressive statistics in the sales business. In 2005, for example, Keeneland sold 7,827 horses for $744,411,300. This impressive total included all kinds of bloodstock: horses in training, mares in foal, stallions, and yearlings. The changing fortunes of the bloodstock industry (and of the international rich) can be charted through Keeneland's statistics. The highest price ever paid for a colt is $13,100,000 for Seattle Dancer, bought by Robert Sangster in 1985. The highest price ever paid for a filly is $9,000,000 for Ashado, bought by Sheik Mohammed at the November Breeding Stock Sale in 2005. The highest average for a consignor was $2,433,750 for eight yearlings sold by Warner L. Jones Jr. in 1985. The total for the eight yearlings of $19,470,000 is also the record for the highest aggregate for a consignor. The highest average for a sire was $3,446,666 for twelve yearlings by Northern Dancer in 1984, the year the market peaked. The most influential players in the transformation of the bloodstock industry during the 1980s are all here: Robert Sangster, Sheik Mohammed, and Kentucky hardboot Warner L. Jones Jr., and they are accompanied by Northern Dancer, the equine catalyst of the bloodstock revolution.

In terms of volume of bloodstock sold, North America completely overshadows the European market. In 2005, 4,357 yearlings were sold for $459,817,900 at premier sales in North America (Keeneland September, Fasig Tipton Saratoga, Kentucky July and September). Europe (Agence Française, Deauville, Goffs Million, Tattersalls September) could only manage 2,221 and an aggregate of $225,367,612. However, at the top end, Europe is becoming increasingly competitive. The October Sale held at Tattersalls is the most prestigious European sale since the Houghton sale was discontinued in 2003. In 2005, 499 yearlings were sold for 59,635,000 guineas ($107,707,071) an average of $215,845, almost twice as much as the Keeneland September Sale average. Both Keeneland and Tattersalls are traditionally dominated by the Coolmore organization and the Maktoum family, who have between them bought fifteen of the twenty-three top priced yearlings bought at Keeneland since 1999. The small number of buyers at the top end of the auction creates a strange market that bears little relation to those that are created between the many buyers who are unknown to each other in the lower-price echelons. The most prestigious annual yearling sale in North America, the Keeneland Select Sale, produced eleven Kentucky Derby winners after 1945. It was discontinued in 2002, under pressure from consignors who would rather sell in September, giving their yearlings more time to mature. Some of the horses sold at Keeneland are exported to breed and race in Europe, including those purchased by Coolmore, but North American horses with

pedigrees thought to favor racing on the dirt often stay in the US, leaving European sires and sales to fill the European stables.

Keeneland has succeeded in dominating the North American sales scene, although Fasig Tipton, in direct competition, instigated a sale across town in Lexington in 1972 that has been successful. As might be expected, with a controlling board that consists of local horsemen and horsewomen, Keeneland has strong ties in the breeding community. This, along with Keeneland's explicitly traditionalist stance, has led to the suggestion that the means by which they choose their stock for select sales has been influenced by pedigree, human and equine, more than by the quality of the individual horse. Fasig Tipton appears to have greater independence from the breeding community. Fasig Tipton is the value-for-money version of Keeneland, which is regarded as the preserve of the conventionally well-bred horse and the equally well-connected owner. This international yet highly parochial arrangement makes Keeneland the best place to observe the cultural economy of the racehorse.

SALES

Sitting quietly in a corner of the auction room at Keeneland in Kentucky I am struck by the remarkably cosmopolitan encounter before me. A Japanese businessman is locked in battle with an Irish stallioneer for the right to possess an imposing colt, the "talking" horse of the sale. Looking on are members of the Dubai ruling family and representatives of the Saudi royal family. The local crowd—peanut butter billionaires, loggers, computer magnates, entrepreneurs, and members of the Kentucky horsey set—are all there too, craning to see who has the upper hand. The Brits are mostly slumped in their chairs wishing they could be part of the action on this scale. The trappings of old-time Kentucky formality are there—familiar and comforting to the British. However, the tuxedos worn by the auctioneers clash with my own sense of the aesthetics of the horse sale, acquired at Tattersalls where auctioneers wear nothing but sensible country suits and brown shoes. Tuxedos seem a little too razzmatazz in this context. More disturbing than their attire is the auctioneer's singsong, such a contrast to the careful enunciation of the English or Irish equivalent.

Everyone should attend a Thoroughbred auction at some point in their lives, if only because it is possible to intrude on people who generally entertain themselves in private, at casinos, in palaces, or on yachts. The sales are public and anyone can wander onto the grounds, ask to look at a yearling, and stand looking serious and important while it walks up and down in front of them. Observers like me can also mingle freely with buyers and vendors in the sales pavilions and auditoriums. The

now defunct Keeneland Select Sale is the only sale I have attended where seats in the pavilion must be booked and the public is forced to look on from beyond the glass. That was the most fashionable sale I had attended. Some men in the audience wore tuxedoes, while their partners wore big hair, shoulder pads, and jewels. It was a most arresting sight, particularly since I had been playing football with the exercise riders in the grounds before I came to the auditorium and was wearing shorts, trainers, and a stinky T-shirt, in anticipation of the usual crowd and sartorial standards. At most of the sales held in North America and Europe, you can wear anything, pile in with your free catalog, available from the office, and take your seat next to anyone at all.

The scene that unfolds can be thrilling, as bidders duel with each other to possess horses that either look regal and self-important, or refuse to cooperate and spend their time in the ring attempting to defecate into the front row and neighing for their friends. The action is certainly more interesting in the company of someone who is kind enough to explain who is who and what is happening. The surface is fun, but the inside story is intriguing and addictive. Attending a sale is also an intensely sociable affair, and the socializing that goes on away from the pavilion is an intrinsic part of the action. Lavish parties reinforce alliances and encourage optimism. Sales talk is replaced by party talk, which is much the same thing, but sounds more convincing when you are holding a gin and tonic and standing next to a profiterole mountain or an ice carving. Apart from horse buying itself, the parties are intended to create confidence in particular organizations within a market that is sensitive to the chill winds of rumor or recession. Parties allow guests to inspect the credentials of their hosts ("I'd like you to meet Bob Jr., studying at UK, gonna be a horseman just like his Daddy"), and the extent of their hospitality reflects both their good breeding and their current financial health. Coming from the Newmarket tradition of a sales-time whiskey and soda in the bar at Tattersalls, the stud office, or even the kitchen, to the opulence of being served drinks from a bar in the library while someone else parked my car was quite a shock.

Despite the differences in tone between Kentucky and Newmarket, the conventions that govern the sales are remarkably similar, and their enactment creates an international community of experts, all known to each other. The final Keeneland Select Sale that I attended in 2002 epitomized the international bloodstock auction. The crisis of confidence that was experienced in this particular year is also instructive in terms of the future of such jamborees. The select sale was canceled in 2003 for the first time in more than fifty years, and it has not been held since. The cancellation was partly due to the impact of MRLS, which affected a disproportionate number of early foals, the most likely candidates for a sale held in July. Many buyers,

breeders, and owners also talked to me about international uncertainty (specifically, the war with Iraq and international terrorism), corruption in American business (the Enron factor), and instability in the stock market. It would seem that the record highs of 2001 did Keeneland no favors in recruiting buyers to the 2002 select sale, as things fell rapidly away afterward, leaving lower budgets and few people prepared to pay an average of $710,000 for a horse. Many told me that they would rather be involved at the top end of a September market than the middle of a boutique-type July market. The sale was therefore a victim of its own success, combined with a change in both domestic and international circumstances. The Houghton Sale at Tattersalls survived until 2003, when it too succumbed to pressure from sellers and was "rebranded" as part of the October sales. These take place over a longer period, with a catalog order determined by mare names, so that quality is spread throughout the sale. Record sales figures in 2006 suggest that the overproduction that many traditional breeders have been concerned about has not affected the market.

YEARLINGS

Yearlings are brought to Keeneland several days before the sale so that potential buyers can inspect them. Before the yearlings arrive there is intense activity around the scores of sales barns where they will be housed, the backstage area. Vendors prepare the barn areas they are to sell from by erecting awnings in their own colors. Boards are hung above the barn, giving their names and slogans, along with individual boards for each yearling, including any update to the catalog (e.g., "half brother made winning debut over six furlongs at Santa Anita last Thursday"). The area is further domesticated by pots of flowers in the stud's colors, benches, director's chairs embroidered with the name of the stud, and tables ready to hold visiting cards and tempting snacks. The equipment for the horses is then shipped in, along with feed and hay. Even those of us preoccupied with horses in training on the track begin to get excited once the yearlings start to arrive. Many of the exercise riders, pony girls, and hot walkers will tout for work with the studs during the afternoons and may even take the week off from the track in order to cherry pick the better money that can be made during the sale.

The city itself is buzzing. Every jet that passes over is identified as that of Sheik Mohammed. "Here comes the man himself!" Hotels and houses are packed with guests; restaurants are booked solid. Any trip into town to eat will involve encountering old acquaintances from previous years. The local television news, along with the *Lexington Herald Leader* and the *Louisville Courier Journal* start to build up their coverage. The anticipation is palpable. Everyone has a view about the coming sale,

and by the time it begins an orthodox position will have emerged. At the 2002 sales people were anxious: it was felt that the horses were not good enough and that the international situation was too fragile to sustain a strong market. As one bloodstock agent told me, "They've got some nice horses this year, but we're looking for replacements for our top stallions, and who knows what they'll go for. It's a strong enough sale, but there are no standouts for me. And right now, people might be thinking about holding onto their money."

Bloodstock agents buy yearlings on behalf of their clients. The most diligent of them will have spent time previous to the sales inspecting yearlings at farms in and around Kentucky. This practice extends the bloodstock auction to the farm. Big farms are often very busy and operate as they would on the sales grounds. However, the approach of vendors is even more personalized since agents make individual appointments and can be received as valued guests, every staff member primed to accommodate their particular expectations. Inside knowledge about an individual yearling is offered as proof of friendship or respect: "I wouldn't tell everyone this, Joe, but the Storm Cat is the guy you want to be looking at. Him and the Rahy filly." Agents ask for favorites, and vendors, after a great show of reluctance, inevitably cooperate. This inside knowledge is treated with great skepticism by many bloodstock agents, as one explained: "Of course he's going to show me that Rahy. She isn't going to get much attention at the sale. She's small. She's not so flashy as the colt. But he figures if he gets her out early and starts us thinking he might get her sold. If there's one on the farm that you should see, then you usually know he's there already. If they're up for showing you something, then it's because they want to sell it." The well-prepared vendor will choose a horse that is within the established price range of each agent and his clients. Ideally the horse may have some other connection to this agent or one of his clients, who may have been successful with a half sibling, or be known to buy offspring by a particular sire. The most successful vendor will of course change strategy should an agent show a particular affection for a different horse. By the time the sale begins most agents will have decided which horses they expect to bid for on behalf of their clients.

The first stage in the process of selecting yearlings is to consult the sales catalog to see what "paper" is available. Agents look for pedigrees that complement their clients' requirements and budget (if they have one). Many of the agents to whom I spoke told me that they looked for horses bred on similar lines to those that had been "lucky" for particular owners in the past. Others look for yearlings by first-season sires who they think are going to be "the next big thing." As might be expected, each type of horse fits with a particular kind of owner profile. Each yearling is represented at the sale by a pedigree occupying a single page in the sales catalog. The three-

generation pedigree is shown across the top of the page and the family, or female, line is represented in the bottom half. The top line, or "tail male" line of the pedigree—the sire, grandsire, and great-grandsire—is said to constitute the "strength" of the pedigree relative to the bottom or female line. Occasionally the dam line may be particularly strong, in the sense that the family may have either been top performers or produced top performers, but the likelihood is that a good mare will have been mated to sires that complement this quality. It is very rare to see a good mare mated to an inferior stallion. This relates to beliefs concerning the influence a mare may have over her foals and also the fact that the Thoroughbred is principally selected on the male side. Although the majority of mares (approximately 52 percent) become breeding stock, only a tiny proportion of colts (approximately 2 percent) will reproduce. Performance on the racetrack is the primary determinant of whether or not a colt will be given a chance to reproduce. By contrast, mares are able to excel either on the racecourse or at stud. They have two shots at greatness. Many unraced or slow race mares have turned out to be producers of high-class racehorses, far better than themselves. Rather than prompt a rethink in the grounds for selecting stallions, however, this asymmetrical arrangement is shrugged off as a reflection of the inherent suitability of mares for reproduction.[7]

Vendors are often highly experienced in the business of selling and promotion. They have a lot riding on the outcome of their yearling's five minutes in the sales ring, the result of two years of planning and preparation. Last-minute injury or sickness can ruin the best laid plans. Yearlings are feisty creatures at the best of times, and transporting them to a new and unfamiliar place, where they are surrounded by lots of other young horses, any of which could be carrying an infection, is a huge risk in itself. In order to flourish, the high-stakes players must learn to either conceal or to control their nerves. Any evidence of anxiety acts as a deterrent to potential buyers, who want to see serene self-confidence. As the agent of a big buyer approached a vendor I was spending time with, I heard him say to himself under his breath, "Be cool, be cool."

Vendors compete with each other to spoil potential buyers. Keeneland Select Sale 2002 was notable for its homemade cookies, lemonade, and ice cream—far superior to the previous year's candy bars and fruit. Tables of goodies tempt agents to linger long enough to inspect a horse or two. Homemade treats personalize the interaction between the vendor and agent, as well as contributing to a rustic aura that was cultivated by many. By presenting themselves as farmers, with cookies and homegrown apples at the ready, the vendors simplify their activities. Their modesty deflects from the financial significance of the sale and from the complexity of the process of buying and selling racehorses. The effect is, "Trust me, I'm doing some-

thing uncomplicated." I always wondered what it would be like if the lawyers and accountants who make this encounter possible made it to the sales, carrying laptops and wearing pinstripe suits. As it is, people dress the same: in chinos and check shirt, baseball cap or straw hat. They resemble moderately wealthy, decent, clean-cut farmers. Their appearance communicates essential qualities: they are honest, hard workers, with callused hands and straight backs, unbowed by whatever misfortune might befall them.

Anyone approaching a barn will be greeted, preferably by name: "Hello, Bill. How are you today? Feelin' all right? Awful hot ain't it?" Vendors are almost equally welcoming to those they cannot place; they squeezed my hand as though I was a long lost cousin while they looked at me wondering who I was and whether they should know my name. Completing the hospitality at one particular barn were beautiful bronzed blondes in uniform tiny shorts who showed the horses and served the ice cream, with a smile. The impression is that you couldn't be more welcome to be a part of this successful and confident operation, which has time to produce delicious consumables as well as shiny yearlings. THAT'S HOW IMPORTANT YOU ARE TO US! Deliberate modesty is less evident at the sales in Europe, where vendors often cultivate an air of detached superiority. Their reputations rests on their claim to a place in the super-status world of racing, and not with the claim to an earthy, wholesome relationship with the land and the animals produced on that land. One European vendor explained to me that he would rather be thought of as clever or shrewd than honest: "I don't buy all this ice cream and cookies crap. If you've got a good horse, then bring it out and show it to me. We aren't here to make friends, or join the knitting circle. We're here to sell good horses."

Looking at yearlings is a standardized procedure, and to the uninitiated it could appear that the agent looking at a horse is searching for something objective that will make itself obvious in the course of the inspection. However, there is little agreement as to what makes one of two similar yearlings a better potential racehorse. Being good at something that is virtually impossible demands a great deal of impression management. Bloodstock agents are fascinating characters. Many achieve the feat of respectability in a precarious trade through excessive seriousness and aloof demeanors. Others are lovable rogues, who enjoy their nebulous status. Some are simply crooks. In 1999, the British High Court awarded £51,000 ($87,510) in damages against two bloodstock agents who had allegedly colluded in the bidding for a horse named Pru's Profiles, from 14,000 guineas to the purchase price of £29,400 ($50,456). The horse belonged to one of the agents at the time. The problem is that the industry is based on personal relationships and the agent may have commitments to several clients at once, in both a formal and informal sense. Furthermore, these clients may

be either sellers or purchasers of bloodstock, or both, at any one moment. The Federation of Bloodstock Agents (GB) states that "members shall carefully consider whether any potential conflict of interest may exist in any relationship or transactions and must advise their client accordingly." It is difficult to imagine that things are always so clear-cut for this small group of experts.[8]

Agents are also at the mercy of a system that seems to promote dishonesty, as one English agent explained. In the UK the convention is to charge 5 percent to buy a horse on behalf of a client. In the US it is conventional to charge the vendor 5 percent if your client buys his horse. Who can resist taking both? Is it possible to work "fairly" for both the person selling the horse and the person buying the horse? Is it possible to be "fair" to either when working on commissions of this kind? The English agent with whom I spoke told me that even when there is no official payment of commission by the American vendor, there will be some financial reward, what he called a "backhander." He also told me that his refusal to accept this payment from vendors had provoked a lot of criticism among his less fastidious colleagues.

The process of assessing a yearling is connected in only the most tenuous way with possession of a mature racehorse in a year or two. If necessary, intervening factors can be used to account for the failure of the horse to meet expectations, while success can be used to reinforce the original assessment. Faults may be a matter of opinion. Even when they are agreed upon they may be seen as detrimental to the horse's racing future—"Uh oh, crooked legs"—or as a positive endorsement of the horse's inheritance of the ability of its sire—"Aha! Crooked legs!" These faults are forgiven or even admired in offspring of a particular sire but will not be forgiven in the offspring of another. As one agent explained, "I want him to look like his daddy. You know, if he's a Storm Cat, then by god I better know I'm looking at a Storm Cat." Conformation is therefore a relative notion rather than a single objective standard, and the physical assessment of a yearling by an agent is actually a dual articulation of pedigree and confirmation. Faults may also be seen as something that the horse will either be able to "run through" or "grow out of," as in "He turns in a bit, but he's got a lot of growing to do. He'll be fine when he fills out."

Agents vary in their explanations as to exactly which physical properties they are searching for so intently, but almost all engage to some degree with the notion of "correctness," "balance," or "athleticism." As one told me, "I look for an athlete. He has to stand up, but then most of them here do now, with all that scraping and staples and shit. But he has to be able to move, for God's sake. I'd rather he turned out but was an athlete. I hate to see a poor-moving perfect son of a bitch." This agent emphasizes the importance of movement above physical correctness, which he

believes can be produced by the surgical procedures described in the previous chapter. But choices between yearlings almost always rest upon more than simply correctness and athleticism, however perceived or defined. As one informant explained, "I look for a correct horse. Front legs take the strain and they're the first to go if they aren't 100 percent. So he has to be straight. I like to see him walk loose and big-striding. Stretchy. Using his whole body. Watch his tail. Swing it from side to side, really using himself. But then he has to give me something. The extra twenty. A look or a way of carrying himself that says 'I know how good I am and I can do anything.' " Agents often claim to form an opinion about a horse the minute they see it, a kind of love at first sight. They describe this feature of yearling selection as a connection that cannot be explained in terms of a list of necessary and sufficient physical features: "I looked at him and right off I fell in love with him. Hell. You can't explain the kind of thing that happens with these horses. There's something there and he's talking to you and you just know you have to have him."

Showing yearlings is an art form. Of course, by the time they reach the sale these animals are immaculate. They may have had a number of surgical procedures. They have been fed and exercised in combinations that maximize their size and muscle mass. They have been taught to walk in straight lines and to be "stood up," that is to pose. They are accustomed to wearing bridles and rugs and to being transported in noisy vans to unfamiliar places. When they are ready to sell, their coats are polished and any lingering dust is removed with a cloth dipped in paraffin. Their white markings are scrubbed and pristine. Their noses shine with Vaseline, or with Vicks menthol vapor rub in the case of colts, to disguise the tantalizing smells of the fillies. A light coating of baby oil surrounds their eyes and ears, the shine intended to denote good health. Their manes are short and lie perfectly on one side of their necks, the result of regular plaiting. Their feet are shod and painted with hoof black: equine nail varnish.

At the sale the ideal yearling is "professional," with the odd moment of exuberance. Yearlings should not be passive. The yearling inspection begins when a buyer turns up at the barn and requests "the Storm Cat" or "the Deputy Minister," or to see each of the inhabitants of the barn in turn. People rush around, preparing their own yearlings, picking straw out of their tails, dusting them with a cloth and putting on the bridle. The owner of the stud or his representative offers the viewer an update on the catalog details of each horse, highlighting any winning form that can be attributed to any relative of the horse. The closer the relative and the bigger the win the better. The first yearling emerges from its box. The bloodstock agent narrows his eyes. If he is canny, and likely to buy something, it is probable that he has turned up to look at the horse early in the morning, when the horses are fresh, there are smaller

crowds, and it is cooler. In the relative calm of early-morning Keeneland it is possible to take your yearling out of the crush and take a proper look at him. Anyone looking at a yearling the afternoon before he is to be sold is not likely to become its new owner. Some bloodstock agents work alone, others travel in groups. In both cases the routine will be the same. Horse comes out, agent's eyes narrow, quick notes are made in the catalog. The horse is "stood up" in front of the viewer, and it must stand still, in the pose that is repeated all over the grounds, all over the world, at every racehorse auction. Left side on, outside of left legs visible, inside of right legs visible, both inside the framing left legs. Unlike in showing, here the horse is not taught to stand square, so that the weight is equally distributed on all four legs, but rather offset. When I asked about this, people's explanation was that it enabled the agent to see both inside and outside of each leg simply by traveling around the horse. In other words, it saves time when there are a lot of horses to look at.

The yearling is then encouraged into action. Like Thoroughbred horse sex, the yearling show is a lot less energetic than one might expect; it is conducted entirely at a walk. The yearling must not break into a trot and will be asked to repeat the show if he does so. The yearling takes a predetermined route around the agent. As it travels away from him the agent will stand behind it, watching intently. The horse will then turn toward him. He will get in front of it and stare intently at its front legs. It will go past him; again he will be looking down at its legs. It will turn toward him once more and stop straight in front of him. The agent might make a quick note in his catalog. Some agents touch the yearlings, perhaps making a fist and putting it under the horse's throat to assess the width of the airway, or holding a hand out over the yearling's withers to assess its height. Only very occasionally is there more touching than this. The agent might have assessed the horse on its home farm; others told me that they were looking for something mystical rather than mechanical. One said, "I look at hundreds of yearlings each year and maybe a dozen really have this thing that you can't define. A feel about them. The mechanical stuff is for the vet. He can go and look at the X-rays and the throat and all that. That's not my job. I have to find what I think are the best yearlings in the sale that we would have an interest in buying. The vet's job is to tell us if they're sound."

After a few days spent with different veterinarians assessing yearlings it became clear that the role of the vet was also dependent upon his or her relationship with each particular client. One of the very senior vets with whom I spent time was capable of putting his client off a horse with a single word or facial expression, effortlessly overruling the judgment of the bloodstock agent. His assessment of each horse took less than fifteen minutes—ten minutes with the horse, flexing joints and performing an endoscopic examination, and five minutes in the repository, looking

through the horse's X-rays. Less established vets were keen to accommodate the views of the client and his staff. "Star" vets undoubtedly offer more than an opinion about the locomotive potential of a horse, and some are credited with a fine eye in their own right. Needless to say, these vets are subject to pressures similar to those experienced by agents. They have multiple and sometimes conflicting responsibilities when vetting horses belonging to existing clients on behalf of a buyer.

THE RING

The British Thoroughbred website tells visitors, "At a sale (also known as a public auction) you bid the amount of money you are prepared to pay. The prices are dictated purely by market forces. All the horses to be sold will be stabled during the sale within one area, so you can readily compare one potential purchase with another." I would suggest that things are far more complex than this perversely bland description suggests. The grounds of the auction ring are the backstage to the performance that takes place in the sales pavilion. The audience that witnesses this event is variable in size and composition. For the two nights of the select sale at Keeneland in 2002, the audience was a small subset of the people who had come to observe the spectacle. As well as being a sale of international importance to the industry, the select sale was entertainment. Among the crowd that flocked to Keeneland on these two evenings were people who worked within the industry, on the track and at the farms, who had no direct involvement in this sale. These people were there to see who bought what—and to meet up with friends: "We just hang out. Have a beer. See who's here. You know. Who's with who, that kind of thing. It's cool. We get a buzz off being here and maybe we know a story or two behind one of the horses or the buyers or the sellers and maybe someone else knows something else and we get together and shoot the breeze a little."[9]

Local people with no involvement in the horse industry also come to sales simply to watch. One spectator, a teacher in Lexington, told me, "We come every year. We fill in the catalog and we wait for the big one. It's something different. It's what the Blue Grass is about. It's our tradition, you know, around here. You can see the big guys and see what someone who owns a country looks like. You can watch someone spend a million or more. The horses are pretty too. It's just something we like to do, to come and watch. See what might happen." Participants, interested parties, and spectators all mill around the sales pavilion and show ring, one category often indistinguishable from another to the untrained eye. The group wearing evening dress that takes their seats well before the 7:30 start will not be joined by the people responsible for the majority of the bidding until the yearlings they are interested in

have entered the ring. The spectators thus establish themselves as the audience—made up of bank employees, lawyers, Keeneland employees and board members, breeders, and the local great and good. People who intend to take an active part in the sale will not sit down at the beginning and watch the entire show from start to finish. They will be up and down from their reserved seats, sweeping in and out of the pavilion, signing forms and consulting staff and assistants. A mobile phone may be welded to the person's ear, or perhaps to that of the person who is employed to perform that function on his or her behalf.

The audience is an essential part of the spectacle, and sales are public in order to guarantee transparency. This idea fits well with the image of the auction that the industry would like to project. Someone breeds a horse and wants to sell it, so he takes it to the auction. Someone else wants to buy a horse, so he comes to the auction. If more than one person wants that particular horse, then all must compete for it, and the one who makes the highest bid gets the horse. According to this model, the value of a horse is established by how much someone is prepared to pay for it. This model enables the industry to invoke the statistics produced at the auction as reflecting the state of the industry and the value of particular stock. Not surprisingly, there are complicating factors, some of which should be obvious from the preceding discussions. The most important of these is that the bloodstock industry cannot be neatly divided into buyers and sellers. Many of the largest buyers of yearlings are also the controllers of one of the most significant factors of production, the stallions.

It is not against the rules of the select sale to bid on a horse you may own, partly or in full, as the Keeneland catalog states: "The right to bid in this sale is reserved for all sellers, including their disclosed and undisclosed agents, unless otherwise announced at the time of sale. Buyers agree and acknowledge that sellers have the right to set reserves upon horses so entered which are not disclosed to buyers and also have the right to conduct buy-bidding as related to their entries." Furthermore, ownership is often not a matter of public knowledge; therefore, it is not only acceptable for an owner to bid on his horse but it is also often impossible to tell when he does. The popularity of a horse can be reassuring to a bidder, since it implies that someone else shares your judgment that the horse will make a fine racehorse and is prepared to stake money on it. It must be a great disappointment to discover that you have been bidding, probably indirectly, against the owner of the horse, who is only interested in maximizing his profit. More entertaining are the stories of greedy owners or part owners who overestimate the strength of demand for their horses and end up buying them back in the heat of the battle, becoming liable for commission and missing out on a generous price.[10]

It is in the interests of stallion owners to protect their investments, by supporting

the offspring of their studs in the sales ring. If the average price of a stallion's offspring drops, then it is likely that the nomination fee will follow suit. The two measurements shadow each other, especially in the absence of offspring performance in the fragile confidence-based market of young sires in their first two seasons. At the Tattersalls October Sale in 2004, twenty-four out of the twenty-five yearlings purchased by Coolmore were by their own stallions. Of fifty-five yearlings purchased by the Maktoum family, twenty-eight were by their own stallions. This picture is further complicated by the fact that the ownership of many yearlings is less straightforward than might be imagined. If the reputation of a stallion is on the line, it is in the interests of his owner to put through the ring offspring in whom they own interests on the basis that they can bid them up to fantastic prices without incurring full liability if no other buyer is found. The most common of these arrangements is the foal share agreement. A mare is bred to an expensive stallion on the basis that the foal will be part owned by the stallion's managers. At the sales the yearling is listed in the catalog as being consigned by a farm or individual not easily associated with its owner, or the owner of its sire. The manager of the stallion can then bid up competitors for the yearling in the knowledge that he is bidding only a fraction of the dollar. These factors create the enormous buyback rate of the select sales, which in 2001 reached 50 percent. Newcomers without contacts in the business are the most likely to be exploited by these arrangements. Large-scale owner and computer magnate Satish Sanan came to the select sale for the first time in 1997 and spent $2,070,000 on six yearlings. He also bought the highest priced colt sold in North America that year, for $2.3 million, and spent $9 million on two broodmares in England. He described himself as "like a kid in the candy store . . . But I didn't know there were a bunch of crooks out there, that we were being run up in the bidding, that there were hidden foal-sharing arrangements, that there was no disclosure about who owned the horse being sold. The advisers I had didn't warn me about the pitfalls of the game. It was a sad state of affairs and a bad introduction to the business."[11]

Unwritten codes pit newcomers against established members of the industry. Practices like buy bidding and disguised foal shares are not seen as deceitful at all, but rather as "part of the game." One old-timer blamed newcomers for their own exploitation: "It's a game. It's like poker. Does the man bitching and moaning want me to take him on and give it all I've got or does he want me to kiss his ass? This game is about getting an edge, and you take it any way you can get it. Is he going to look out for me on his way up? I doubt it. He has to learn. And everyone does eventually. He'll be doing it himself later on, laughing at some poor son of a bitch and suddenly saying, 'Now I get it.' I'm not saying you learn and then you never get rolled again. I'm telling you. That is the game. It's not just for the new guy. We're all in it every

day. We just got wise is all. If you don't learn quick they'll chew you up and spit you out."

Sanan disagrees: "For the good of the game there should be some changes . . . When a horse is in a sale, rather than being listed by consignor, the catalog should say who owns this horse. If it's a foal share it should be in there. Nothing against Coolmore, but if John Magnier is selling it, let's put down that John Magnier is selling it. People are not stupid. They may be burned once, twice, three times, but eventually they'll figure it out. We've been burned. It's no different than what's happened on Wall Street, with Enron and WorldCom . . . for every person like me who is determined to stay in this for the long term, there probably are nine others who have come in and are long gone." All of the people to whom I spoke at the sales were wary of "getting burned," but obviously their presence meant that they were not one of those who had been turned off by the chicanery. While some felt that things should change, many argued that this only added to the excitement. In the UK, the Federation of Bloodstock Agents was founded in 2001 and issued a voluntary code of practice. In the US, the first ethical code for the auction industry was introduced at a press conference at Keeneland in December 2004, the result of the work of Satish Sanan and his Alliance for Industry Reform (AIR). There are no formal sanctions attached to breaching the code, which will operate via peer pressure and the education of buyers. However, for some of the people at the sales, codes such as these are simply a further challenge in a context where the danger of being exploited is offset by the opportunity of exploiting someone else. For these people, ethical codes and the tricks of the trade are parts of the competition, an exclusive game within an exclusive game. They don't want to change the rules; they want to be a part of the sting.[12]

BREEZE-UPS

Changes in the priorities of racehorse owners are reflected in the market for Thoroughbreds, where the interests of buyers of bloodstock have come to take precedence over those of vendors. This is particularly obvious in the latest growth area in bloodstock sales, the two-year-old in training, or breeze-up, sales. Although these were first instigated more than fifty years ago by Humphrey Finney of Fasig Tipton, an auctioneer who was always ahead of his time, it is only recently that they have flourished, as the emphasis has switched from breeding a champion (in the days of owner breeders), to picking a champion (the rise of the yearling market), to buying a horse with at least a little proven ability, one that has shown itself to be up to the rigors of training (breeze-ups). Two-year-olds can begin to compete immediately, offering the possibility of a quick return to offset expensive training fees.

Breeze-up sales are for two-year-olds, which, according to Keeneland's conditions of sale, must not have been in training for a period of more than ninety days. As well as all of the action of the yearling sales, they also involve the horses being ridden on the track at a gallop. The gallop used to be conducted at half speed, but, as might be expected from the preceding discussion, more recently breeze-ups have become competitive. The two-year-olds run alone but race against the clock. In all known recent sales, price has correlated strongly with the speed in which the horse has covered the course. Those clocking the fastest one furlong (eighth of a mile) are invariably the most expensive. This phenomenon has become known as the "ten-second two-year-old," and it was the object of scorn among many of the breeders, veterinarians, and trainers to whom I spoke, as one vet confirmed: "The two-year-old sales are completely crazy. These are babies, and they're being asked to run for their lives. Three months on the track and they're beating older horses? I just don't buy it. They get all competitive. I mean, the tracks, the sales companies, the vendors. God knows what some of these have been given, but I've never seen any horse working out in ten and change [just over ten seconds]. It all comes down to people wanting speed. We're crazy about speed. See, the two-year-old is a better buy now than a yearling. Closer to a runner. Unless you know the trainer, I would watch out."

An Irish racing manager, working in Kentucky, who I consulted agrees with this assessment. "Well, it's just greed isn't it?" he said. "Greed and stupidity. People who see that one of these poor unfortunates is faster than the other and thinks that it's better. It's pared-down, lowest-common-denominator stuff. Horses just don't work like that. They aren't machines. They mature at different rates, physically and mentally. You ask a two-year-old to run that fast and it might do it on the day, but there's a chance it may never reproduce that form because you've blown its mind. Or it's body. I definitely think that drug testing should be introduced to the two-year-old sales. Restrictions too. After all, it's a race, and the purse is the sales dollar." Even some trainers, potential customers, balk at this kind of sale, saying things like "I would never want a horse from the two-year-old sales, here or in the States, because it would be [ruined]. If I had to have one and I had a choice, I'd take the slowest because it might have some chance of recovering from the experience of being trained for the equivalent of the Derby when in my opinion it should likely as not not even have been put in training." The popularity of the breeze-up sale is a recent phenomenon, a result of the pressures placed on horses by consignors eager to provide what they imagine the market demands. The intention of the ten-second two-year-old is to restrict the nonproductive phase of the racehorse and to reduce the financial burden on the owner by narrowing the gap between the yearling as an immature animal and the racehorse as a source of wealth.

CONSPICUOUS CONSUMPTION

Buying things, including baby racehorses, is not simply about the rational, instrumental, calculated actions of sovereign individuals in independent markets operating at equilibrium. It is a cultural activity. The purchase of yearlings at auction illustrates the limitations of the naïve use-value theory of exchange particularly well, and it supports the contention made by sociologist Thorstein Veblen in 1899 that consumption can be used to express identity. According to Veblen, consumption capable of demonstrating and enforcing social hierarchies involves either goods that are of no practical use—"conspicuous consumption"—or time which is not devoted to any productive activity—"conspicuous leisure." In other words, it is either the consumption of superfluities or of time, both of which reflect the possession of wealth. The yearling auction involves both.[13]

Racing itself is pointless. It has no product. It involves being on a racecourse on weekday afternoons. What could better express the separation of men of this world from that of the masses? When I asked one of my Newmarket informants about his opinions of the ordinary, nonracing people of Britain, he replied, "What do you mean? The kind of people who count ball bearings in Bootle? I don't know anything about them! They're foreign to me. They're a different species." The distinction between this man and the people he imagined "out there" in Bootle is based on labor, epitomized by the task of counting ball bearings, which is repetitive, industrial, and low-skill. The relationship between this task and any larger scheme is obscure. It is small-time, boring, gray, and unimaginative. It takes place in an unpleasant setting and involves inanimate objects—materials and machines alienated and alienating from the natural world. The clear implication is that it is everything that this man's life is not. The yearling auction is multiply conspicuous according to Veblen's criteria. First, it concerns objects that have no worth outside a set of measurements (average earnings index, number of starters per crop, pedigree, for example) that create value rather than measure actual, usable value. Second, these objects constitute the basic elements of a complicated spectacle that has no practical purpose.

The idea that people in this field produce racing in order to provide a betting medium is rejected by many of my informants in the US and the UK. They distance themselves from the consumption of racing by punters or handicappers and describe their own vocation in terms that are internal to the structure of racing itself—for example, "The purpose of racing is the improvement of the breed." Furthermore, racing "isn't a job—it's a way of life." If racing's producers saw the purpose of racing as producing a gambling medium, they would be acknowledging that they are in the

service of the gambling public. Racehorse training and breeding would become work (and, even worse, labor directed at servicing the needs of a group of consumers conventionally characterized as lower class), rather than leisure, and as such it would lose its attraction to those for whom separation from the ball bearing counters is so desirable.

To racing's producers the market for yearlings is also wrapped up in the acceptability of uncertainty, the risks involved when there is no consistent way of telling which of the yearlings will turn into good racehorses. This makes participation in the yearling market a sport (within a sport) or perhaps a game, involving high stakes and the opportunity of reward for competitive risk taking and/or manipulation, resulting in gains and losses in status. The sales ring is a competitive arena, and it was compared to a boxing ring by some of my informants, with the interaction between bidders seen as a match: "You go in there and try to stay cool, try to keep your head. You have to be like a good fighter, you know. You have to stick to the plan. Try to force your plan on the opposition. Visualize the outcome. If it feels good . . . go for it. Sometimes you can't just protect yourself, you know [he puts his hands up in front of his head like a boxer]. Sometimes you have to go for the killer punch. Pow. It's a buzz. No doubt about that. But it can be painful too." Another bidder told me, "I'm a sales addict! I need therapy! Don't let me buy another colt!"

There is no doubt that competition is keenly felt in the sales ring. It is what makes prestige available. At the highest levels of the sales, only a very small number of people, known to each other and to everyone in the industry, will compete for yearlings. Here confrontation reaches a peak, since yearlings are unique and the bidding on one can take on the structure of a duel. In a duel the price or reward of victory is the destruction of your opponent. Before the other bidders drop out, the auction establishes only that the horse is desirable to the group of people in attendance. When only two people are left in the bidding, the exchange becomes highly personal. Sheik Mohammed wants it. How far will he go to get it? Can Magnier hold out? The crowd at Keeneland loves these kinds of slugging matches, partly because the price is going up and everyone loves that, partly because this is what they have come to see, a gladiatorial contest between two people. The outcome is that one will triumph and be even more feted, and the other will look like a heel, which can be incredibly pleasing to those of us excluded from participation by our financial limitations or alternate priorities.

Each time a racehorse is sold there is the potential for wealth creation. These transactions are profitable for sellers, most of whom are also buyers of bloodstock. Increasing the number of transactions increases the number of opportunities for gain. It is now not unusual for a racehorse to be sold as a foal, as a yearling, and as a

two-year-old. At each stage, the animal has the potential to produce wealth, though by the same token it may fail to appreciate at any stage. The increased number and varieties of economic activities through which a racehorse may generate wealth before it has run in a race marks this category of bloodstock as the most intensively worked upon of all. The unraced racehorse is the most financially fecund category of bloodstock because its value is a matter for conjecture. Value can therefore be created through marketing, surgical correction, corrective shoeing, association, "bigging up," "bidding up," deceit, and a dozen other forms of manipulation. To insiders, these are not manipulations of the market, but part of it.

Although a single poor performance in a race can be explained away, several poor performances cannot, and at this point the value of a horse becomes calculable in a way that it could not beforehand. Similarly, a stallion that has produced offspring will be assessed on that basis. The market for unraced racehorses is therefore a virtual market, based on techniques including pedigrees, the bloodstock agent's "eye," average price of offspring indexes, and cosmetic gestures like ten-second workouts, straight legs, and Vaselined noses. Inside the sales ring, these factors are combined with a confusion of buyers and sellers, vested interests, buy bidding, secret foal shares, information, and misinformation to produce a complicated cultural artifact expressive of the fluency of its participants in a private language. The auction ring is as competitive and potentially fulfilling an arena as the racecourse, the other place where status is available to those who can afford to participate. Yearlings sold at auction become the property of the highest bidder immediately, and many are shipped directly to their trainers to begin their careers on the track. The next chapter explores the racetrack as this chapter has explored the auction ring: looking beyond the surface appearance of competition between horses, to reveal competition that takes place between people.

CHAPTER SEVEN

TRAINING

Stories about racing often concentrate on the exploits of individual horses, trainers, and jockeys. Laura Hillenbrand's *Seabiscuit*, Jane Smiley's *Year at the Races*, and Elizabeth Mitchell's *Three Strides before the Wire* all emphasize the excitement of competition between racehorses, the sacrifices made by animals, and the sympathy of their human connections. This chapter looks beyond the guts and glory to examine the activities that take place behind the scenes and make racing possible. In particular it is concerned with the work done by the men and women who are employed in training stables in Newmarket and on racetracks in Kentucky. These men and women have been described as "invisible horsemen," and they receive little attention from the racing media. Their work is dirty and often hazardous. They receive meager rewards, relative to the contribution they make to the sport of racing, and their conditions of work are poorly understood.[1]

When I talked with North American breeders and trainers visiting Newmarket, they assured me that racing in the US escaped the concern with class that was so dominant in the UK. They encouraged me to go and see for myself. One of the women I spoke to, a breeder from Kentucky, told me, "It's called democracy! Something you Brits could learn about!" Even in the face of the glaring inequalities described in this chapter, many of my North American informants were anxious to present racing (and all sport) in the US as doubly democratic. As historians have shown, this image of sport is a surprisingly tenacious but willful misreading that ignores inequalities of class, gender, ethnicity, and race. The distinctions that are made between people in the racing industry in Kentucky are different from those that are made in Newmarket, but they are no less powerful or significant. The

production and training of Thoroughbreds not only exploit existing inequalities between people but also support some distinctive inequalities of their own, based upon an analogy between people and horses, and also on the special status claimed for the sport and the Thoroughbred by its administrators.[2]

Established and substantial inequalities exist between the owners of Thoroughbreds and the men and women who look after them. As among some agricultural workers, the low status, insecurity, and poor wages of Thoroughbred support workers are remarkably well integrated into the system, and are seemingly unimpeachable. The administrators of racing associate the high turnover within the workforce (along with its many social problems, including addictions of various kinds) with the sort of person attracted to the job, rather than to the poor working conditions. As a result, those welfare programs that are provided emphasize the individual's problems without addressing the structural constraints within which these problems occur. Charity and rehabilitation is conservative and also cheaper than labor reform. For reasons that will be made clear in this chapter, stable lads and "racetrackers" (the men and women who work on the backstretches of North American racecourses) are poorly organized and unevenly unionized workforces.[3]

STRUCTURE

The most striking difference between the British and North American systems of training racehorses is that in the UK trainers have permanent yards and transport their horses to the tracks to race. In the US the trainers are based on the tracks while racing is taking place. As racing moves between tracks, so the trainers move their horses, their staff, and their families. Whereas in the UK, the people involved in the production of racing are a sedentary population often based in the racing centers of Lambourn or Newmarket, the producers of racing in the US are an itinerant group, who refer to themselves as "racetrackers." The US exercise riders, hotwalkers (the men and women who lead the horse around the barn to cool it down after it has trained), grooms, and trainers all told me that their mobility produced the strong links that exist within their community. Their migrations followed established paths between, for example, Lexington and Ocala, New York and Louisville, Saratoga and Churchill Downs. The ways in which training is structured in the US and the UK create two very different societies.

There are (at least) two racing communities in both Newmarket and Lexington, the workforce of the stud farm and that of the racecourse or track. When I left my job on a stud in Newmarket to work for a trainer, the people I left behind thought I was crazy. They were of the unanimous opinion that Thoroughbred breeding stock and

the Thoroughbred in training were different creatures, the distinction being the obvious good sense of the former and its absence in the latter. In Lexington, the distinction between farm and track was less rigorously maintained, since many young horses were broken (accustomed to bridle, saddle, and rider) on the farm and not on the track, where they would be unproductive but expensive to board. Exercise riders who were staying at Keeneland throughout the winter (rather than following the sunshine south) would ride at the track in the morning and spend the afternoon "getting on" yearlings on the farms. Links were created between the two spheres that are generally separate in Newmarket and can be symbolized by the split between the training stables of the town and the studs found in the surrounding countryside. The rhythms of the track and the stud are very different, and in order to flourish people must find the environment that best suits their temperament. Many of those who ride racehorses for a living find the stud as boring as the stud workers find the track terrifying.

Many of the workers on studs and racetracks in Kentucky have either worked at or visited studs, yards, and sales in Newmarket, and vice versa. Some of the larger employers, including Coolmore and the National Stud, provide apprenticeships for their workers that involve international travel between racing centers in Europe, North America, and, increasingly, the Middle and Far East, particularly Dubai, Saudi Arabia, Japan, and Hong Kong. Other workers travel independently. Newmarket and Lexington remain the most popular destinations for those in search of experience in what is an increasingly international business. As well as stud hands, exercise riders often move around in search of the most lucrative opportunities, and I got used to bumping into someone at the Keeneland track whom I had last seen riding in Newmarket. Young, single stud hands and work riders are by far the most mobile. They form loosely associated groups of friends who meet up and spend time together before the group is broken up once again, and perhaps reformed, temporarily, elsewhere. Despite the mobility of a certain sector of the workforce, I also encountered many people who were what might be termed "locals," people who had worked in Newmarket or Lexington all their lives, some of them for the same employer.

In Newmarket, the distinctiveness of the community that produces racing rests on an exclusive association with the town. In the US, racetrackers identify less with a single place and emphasize links between people rather than between things and places. As one racetracker explained to me as we sat in his scruffy temporary housing, "If I was told that we had work in Florida, Canada, California, anywhere, I'd just need a minute to grab a bag and I'd leave here and never give it another thought. It's the mark of someone who works on the track. That's why we never clean house!"

This was a very different sentiment to that expressed by a fellow lad in Newmarket, who told me, "I've worked for a few different bosses, but I'll stay in Newmarket. It gets this hold on you and you can't ever get away. The lifestyle or something. Not the money. Definitely not the money. But the place is like Velcro. I tried to go down to London, but you always know you can do a job here, and even though Newmarket's a dump I couldn't live anywhere else now."

The personnel required to train horses in the US are perceived to be different from that required in the UK. In the UK, the horse is placed in the care of a trainer, who traditionally employs a lad to ride, groom, muck out, and take care of all of the needs of three or four horses. In the US, the roles of exercise rider, groom, and hotwalker are separated. This specialization and the degree to which each of these roles is performed by persons who are "freelancing" to various degrees makes training horses far cheaper in the US. The mobility of labor on the track is greater than within the yards at Newmarket. The economic arrangements between trainers and staff are also almost completely unregulated in practice, despite various state-specific interventions. In Kentucky, the roles of exercise rider, groom, and hotwalker were traditionally filled by African American men, but these men have been replaced by a workforce of legal, semilegal, and illegal immigrants, primarily from Latin American states, particularly since the 1970s. All of the eight grooms employed by the trainer for whom I worked were from Mexico, as were the majority of the hotwalkers. This transformation in the ethnic constitution of the workforce is one of the most striking changes in the recent history of the racetrack; however, members of both groups told me that working conditions had changed very little and that Hispanic workers had simply fitted into the worst-paid, least secure jobs as they replaced African Americans as the most vulnerable workers in the United States. The exercise riders I worked with were from England, Ireland, Canada, Mexico, Puerto Rico, and states outside Kentucky. A few were locals.

I use the term "lad" to refer to Newmarket's men and women workers of all ages, in accordance with their wishes. The women I worked alongside preferred to be known as lads, and they found the alternative, "lass," unsatisfactory in a way that "lad" was not, telling me, "I hate being called a lass. It's like being called a girl, isn't it? I do the same work, so I'm a lad. I bet everyone here would say the same." Use of the diminutive term is part of an outdated working lexicon that reflects differences in respect and prestige. The preferable "stable worker" was considered unnecessarily fussy by my colleagues. Many lads attended either the British Racing School or the Northern Racing College and came to Newmarket in the hope of becoming jockeys. Most had ridden ponies or had experience on a local racing yard before moving to Newmarket in order to attend the course for stable staff. These young people were

from all over the UK and also from Ireland, where there is a tradition of horsemanship that is valued within the racing industry. In general, the lads in Newmarket are a far more homogeneous group than the racetrackers of the US. In a sixteen-month period in 2003, for example, 99 percent of students at the British Racing School in Newmarket were identified, by a racing journalist who has presumably consulted the relevant equal opportunities questionnaires, as "white," with only one as "Chinese." At the Northern Racing College, 95 percent were described as "white," with two students identified as "black," two as "Chinese," and one as "Indian." This homogeneity is reflected in the ranks of jockeys. Royston French is the only black jockey currently riding in the UK, of 418 licensed jockeys. The apprentice jockey championship of 2005 was shared between Saleem Golam and Hayley Turner (the first woman to win the award), which creates a picture of diversity that is not produced at any other level in the sport.[4]

As well as the people who take care of the horses' everyday needs, there are a number of individuals who perform supplementary roles in the training of racehorses. These include veterinarians, farriers, dentists, tack and feed salesmen, van drivers, outriders (the men and women who catch loose horses on the track from horseback), and alternative therapists of various kinds. All of these people may be found on the track or in the training yard on any particular day of the week. Their jobs do not confer identity in the same way as the roles of lad, groom, exercise rider, or hotwalker do. It is not coincidental that many of these supplementary roles command a far higher level of remuneration. The contrast between racetrackers or lads and other support staff should certainly not be seen as that between skilled and unskilled worker. On the backstretch and in the yard, one can find people who are incredibly knowledgeable about racehorses. Although there is little or no formal education, learning takes place by imitation and through participation. In contrast to the vets and trainers who also spend considerable amounts of time in contact with racehorses, the extensive specialized knowledge of these workers is unrecorded and therefore undervalued.[5]

Newmarket's stable lads went on strike at the 1975 Guineas meeting. At the time the average wage was £28 ($48) a week, the equivalent of £140 ($241) today. The lads were sitting on the course when champion jockey Willie Carson rode over to the crowds in the stands and told them to clear the course if they wanted to see any racing. A fight broke out. Later that night the lads broke into the racecourse and dug it up with a stolen excavator. Despite the disruption, the Two Thousand Guineas (the first Classic race of the year) took place the next day. Seventy-one of the lads were sacked when they attempted to return to work. The average wage of the racing lad in 2001 was just £180 ($310) a week. Carson said in 2001, "Looking back, some-

body had to do something for the stable lads and the strike did change things. They are taken care of now. Still, it will never be a career job. The only lads who will get rich are those who become jockeys, or the few that look after the champions and see a share of the winnings. It will always be an existence rather than a career."[6] The idea that working in a stable is an existence rather than a career is difficult to dislodge, perhaps because the work performed by stud and stable staff often takes place behind the scenes. This chapter unsettles this arrangement by placing the spotlight upon racetrackers and stable staff. It begins by describing a typical day in the life of a stable lad, highlighting the variety of skills required and the considerable responsibilities involved. It is based upon my experiences of working as a lad on a small, unsuccessful training yard in Newmarket over a period of four years.

TRAINING YARD

One nonrace day in Newmarket is much like any other. I was expected to be in the yard at 6:30 to begin mucking out. I was living in basic accommodations on the yard like many other lads who couldn't afford their own places. My rooms were a converted stallion box, and the rudimentary heating system meant that sometimes I would wake up to find that the glass of water by my bed had frozen. The lodgings were great in summer, and very convenient, although proximity to the yard may not have been so highly valued by someone who did not want to spend twenty-four hours a day with the horses. Colleagues arrived by bike or by car. Each of us would grab a fork and a wheelbarrow and go to work, by putting our first horse on the walker, the giant rotating exercise cage that looks like a hamster wheel on its side. As a newcomer, I found even this difficult at first. The horses were fresh and the spaces involved were tight. The trick was to get the horse into the assigned gap when someone stopped the wheel. I then had to unsnap my horse's rope at the same time as extricating myself. For weeks, one of my horses would try to kick me as he rushed past, often squealing at the same time, scaring me half to death, and on one horrible occasion I failed to duck out in time and had to walk a full turn behind him, trapped in the walker, dodging flying hooves. I spent the first few weeks on the yard alternating between being terrified and amazed at my survival. With the first horse on the walker, I was free to muck out its stable, taking out droppings and wet straw and replenishing the bed with fresh straw or shavings. As the most recent recruit, I was given the three cheapest, least-talented horses to deal with. In the horse world, being cheap and untalented seems to correlate with being mean. Gradually I got to know "my" horses and to anticipate their aggressive moments and even grew fond of their crabby ways.

Bigger yards than mine had a "yard man" who was allocated the task of all of the mucking out and sweeping while the lads focused on grooming and riding their horses. On our yard we were not so lucky. After the stables were cleaned, the horses were groomed in preparation for being ridden. This was not much more than a "quick once over," but particular rules had to be followed. There must be no stains on the horse: any marks were to be washed off before riding out. Manes and tails were to be free from straw and wetted down to ensure that they would lie flat. Hooves were to be picked out and oiled. Horses requiring bandages or boots on their legs should have these applied before their tack. Any failure to perform this minimum of tasks was met with severe disapproval from the trainer, who would punish mistakes by asking, "What the hell are you playing at? You aren't going out like that! I'll be the laughing stock!" "Tongue lashings," such as these would be met with silence and downcast eyes and a quiet word to each other, that "the boss has got the verbals this morning." "Tacking up," placing the saddle and bridle on the horse, was also governed by complex rules. Bridle first, then a number of cloths, pads, and monogrammed rugs applied in a particular order, before the saddle was put in place, along with perhaps a girth guard or other paraphernalia. The reasons behind these ritual preparations were never explained to me, although I soon learned the routine, if only to avoid the disapproving click of the tongue I received from the trainer's wife if I got them wrong. The horses are often far better turned out than the people riding them, but there were also minimum requirements concerning my own personal appearance. My trainer eventually decided he could do nothing about my oversized physique, since I refused to starve myself, but I was to wear the silk on my hat pulled back from the peak in such a way as to distinguish me from a pleasure rider and turn me into a jockey. The gap left on my skullcap was filled by a pair of borrowed goggles. Everyone wore a skullcap on the gallops, though I was one of the few people to wear a full body protector, much to everyone's amusement.

I hadn't ridden a racehorse in training before coming to the yard, but I had ridden Thoroughbreds that had been retrained as polo ponies after dismal racing careers. My trainer's stated opinion was that if I had ridden an ex-racehorse then I would have no problem riding a non-ex-racehorse: "Up you get. This one always stops at the end of the gallop," he told me gaily, and fortunately he was right. My trainer's continual overestimation of my abilities was based partly on the fact that I was free labor and the horses must be ridden. In order to protect myself from this overzealousness I remained the only rider in the yard who would refuse to ride particular horses. My paid peers, some of whom I knew to be afraid, did not have this option, and they would simply "get the leg up" and hope for the best. Being the lowest of the low, with no expectation of advancement within the hierarchy, I was also in the fortunate

position of not having to compete with others, and so my loud admission of fear brought no shame or disadvantage, but rather sympathy from my braver, or more constrained, colleagues. My inadequacy also brought prestige to all of them as they were run away with, uncomplaining, on the animal I had rejected.

"Riding out" on Newmarket Heath was a huge buzz. It was also often terrifying, and sometimes physically excruciating. I never tired of riding out of the yard gates on some worthless old nag, simply because I loved the whole business of being part of the scene, not to mention the physical thrill that I so clearly lacked in my other (academic) life. The lads with whom I chatted on the hoof had a variety of feelings about their trade, but none of them seemed entirely immune to the thrill of the experience of galloping, even if the toughest of them were reluctant to reveal their motivations at first. A lot of lads cultivated an attitude of studied disinterest. Many were nonchalant at all times, under even the most horrifying circumstances. For example: horse running down road into oncoming traffic: lad is unmoved, perhaps mildly annoyed. Horse standing on foot: lad looks slightly pained and pushes it off. Horse walking along road doing nothing particularly untoward: lad is almost asleep, eyes closed, feet out of stirrups, back collapsed in an arc, whip waving at his side in the rhythm of the walk. It wasn't necessary to break down the resistance of people by forcing them to talk about their feelings, however. It was far more productive simply to ride alongside them, hearing them let out a whoop in the middle of a gallop, seeing them grin as they finished way ahead, or slapping the neck of a particular favorite who had performed well. These actions shouldn't be confused with those of a pleasure horse owner who sees the animal as a pet. Some lads undoubtedly had favorites and treated them as such, but in general the thrill of riding had more to do with performing a demanding physical task well and mastering the fractious racehorse so that it could fulfill its destiny. We were all poseurs on the gallops, no matter how untalented we were. At times we looked good, or we imagined we did, and people looked at us enviously (perhaps). Quite apart from these payoffs, the sensation of flying up a gallop on a racehorse is inherently pleasurable to those of us who enjoy suspending control of and responsibility for ourselves.

Between "lots" there was an opportunity to have breakfast, cooked in canteens by the bigger yards, eaten in the trainer's house at smaller yards. Breakfast was a time for recovering from the exertions of the morning so far and recharging the batteries for the work that lay ahead. Often it was spent teasing someone about whatever mistake he or she had made that day. Lads were teased for every conceivable reason: tripping over, falling off, being hung over, having a spot (pimple) or a new haircut. Teasing illuminated and maintained the hierarchies of the yard. Senior staff either didn't participate or did so occasionally and to great effect. The least powerful tried to avoid

confrontation but eventually fought back. Staff occupying the middle tier were by far the most active, jostling for position with their equals, attempting to undermine the authority of their superiors, and viciously squashing those beneath them in the pecking order. I received my own fair share of teasing, including the can of Slim Fast milkshake that appeared at my place on the breakfast table one morning, not to mention numerous references to the size of my feet. Most of these activities seemed designed to draw me in rather than hurt my feelings, and I was grateful to be laughed at as though I was "one of the gang." I was sufficiently separate from the power struggles taking place between the lads to be protected from the most serious of their jibes.

I was lucky in my choice of yard. Other lads told me that they had endured real hardships at the hands of colleagues. It was traditional to play tricks on newcomers, including hanging them up in hay nets, soaking them with water, feeding them laxatives, spiking their drinks, dying their hair, and shaving their eyebrows. More serious, sometimes devastating stories were also told about systematic bullying and sexual harassment by senior staff of their juniors, and particularly, but not exclusively, of women by men. Nothing could have prepared me for the sexual innuendo I encountered on the yard. Sexually explicit or provocative behavior was accepted as part of everyday life, and those who complained (including me) were disciplined by the majority. I was regularly called "tight," "frigid," and "lesbian." In 2005, a number of suicides among Newmarket stable staff prompted a review of current practice, leading to the creation of a telephone helpline. A year earlier the Donoughue Report had found that half of all stable staff had experienced bullying or harassment. The National Trainer's Federation and the Stable Lad's Association, an organization formed after the 1975 strike, issued a joint statement condemning bullying in 2005. It is not clear how such a statement will change the culture of the yard, where professional relationships are rarely separate from personal circumstances and observations.[7]

ON THE RACECOURSE

After riding each of our three or four horses, we were expected to bathe them, take them for a "pick" (graze), groom them, inspect them for injury, and "set fare" (tidy up the straw bed and refill the water) before leaving for lunch. If one of our horses was running that day we would load it up in the van and set off for the racecourse. Long journeys to and from any of the racecourses in England from Newmarket should be spent sleeping. This was the most tedious part of the racing day, only lifted by good conversation, which was rare. If a yard was too small to have its own van and shared with another, this would prompt an exchange of gossip between lads of different yards. Each lad who was prepared to talk (and not all are) would attempt to

establish at least a common acquaintance, not a difficult thing in this environment. Once all information on this person or persons had been exchanged, almost all lads went to sleep, as they do if they remain behind in Newmarket.

At the racecourse the horse was settled in its stable while we headed off for the racecourse canteen, institutions serving cheap food of highly variable quality in dubious settings. The lads' canteen is a refuge for smokers and cardplayers. New arrivals were usually greeted by a familiar face or two, and time in the canteen was generally spent relaxing together talking about people and occasionally horses, eating chocolate, drinking tea, and smoking. About an hour and a half before the race we would begin to ready our horses. The horse should be turned out to the highest standard at this point, as it is acting as an advertisement for the trainer. There was also the extra incentive of the "best turned out" prize on offer. Most horses were plaited, with their manes and tails distributed according to conventions that are the same throughout the equestrian world: little balls of hair along the neck intended to emphasize the perfect crest; tail hair brought in from the top and sides to the center of the tail in a single plait, to set off the buttocks. We also applied quarter marks. These are chessboard patterns on the rump and chevrons on the upper rear legs. They look spectacular on a horse with a coat in good condition and can catch the eye of the turnout judge. To finish, some lads applied a thin layer of baby oil to the eyes, ears, and nostrils to give a healthy sheen.

Entering the paddock half an hour before the race, the horse goes on show to the betting public. At a signal from the trainer we would bring the horse into one of the saddling boxes to have his saddle fitted. The saddle has been weighed out with the jockey, so that the combination of the two produces the weight allotted to the horse for that race by the official handicapper. The horses walk around the paddock until the jockeys arrive; the bell sounds and they mount up. We would then lead the horses onto the track and let them go, often with a pat on the neck or a "good luck" to the jockey. Most of us would then rush to a television monitor to see how "our" horse performed. The monitor had to be close to the gap where we had relinquished, and then had to reclaim, our horses, so often all the lads in the race watched it together. Watching a race as a lad is not dissimilar to watching as an owner. The personal investment is often just as intense, though some lads will show more realism than the average owner of a slow horse. When one of "my" horses won a small race at Newmarket I was beside myself. I watched in the stands and couldn't believe what I was seeing. We had been given no chance! He came up the center of the course, with his four white socks flashing, looking beautiful, irresistible. This was the first time that a race had gone as I had imagined races might when I first began to work on the yard. I ran to fetch him and was intercepted by a much older lad from our yard.

He grabbed me and gave me a hug, almost lifting me off the ground (some feat given our relative dimensions). He said to me, "Enjoy it! Sometimes people wait a lifetime to lead up a winner at Newmarket!" I led my horse to the winner's enclosure with the television cameraman walking backwards in front of me. The photograph taken in the enclosure shows me staring up at the horse with a mixture of adoration, relief, and excitement. I led him away from the crowds and gave him a hug. Moments such as these were to be cherished.

After the race, the lad must bathe and water the horse and walk it around until it has cooled down and its breathing has steadied. It may be called to the dope box to give a urine sample for testing. Having waited for fellow passengers with entries in later races, the horses are loaded onto the van and the long journey home begins. If the racecourse is too far away to travel on the day, lads are accommodated on the course in dedicated lodgings, ranging from decrepit hostels to brand-new purpose-built suites. Back in Newmarket the horses are unloaded and fed and watered, before the lads can think of getting on a bicycle and pedaling off home to bed, or to the pub. The longest days I spent on the yard were racing days, when I would sometimes ride three horses in the morning and then take three horses racing. After an eighteen-hour day I would receive a special allowance of £35 ($58) for going racing and collapse before the next day's early rise.

REWARDS

Despite the substantial skills possessed by many of the lads working in racing in the UK, they are, as a group, badly paid, and they generally experience poor working conditions. In 2000, the British Horseracing Board's Stable Staff Resources Group reported that, out of a workforce of 6,300, each year 1,400 newcomers enter racing and exactly the same number leave. The lads working on a small, unsuccessful yard alongside me were paid less than £200 ($350) a week. Those who work on large, successful yards can expect to have their superior basic wages supplemented by a share of the yard's winnings. Trainers are obliged to share their winnings with staff, although I met lots of people who had not received any money this way. One lad explained, "Unless you get a good horse, you don't even think about the share. Even when you do, you've got a lot of people ahead of you taking their cut. I've had money off him, but never more than a tenner here and there." According to Jockey Club regulations, trainers should keep a record of prize money, the amount that staff are entitled to, and the distribution between staff, and these must be displayed in the yard. The fine for failing to do so is £75 ($129).

The minimum wage for a Grade A, skilled stable worker, who must have worked

continuously in racing for at least five years (or even longer if he or she does not hold a level-three National Vocational Qualification), is £223.14 ($384) per week, for a forty-hour week—less than the average wage of a person employed by a supermarket to stack shelves. The Donoughue Report found that some staff were working a sixty-hour week for £122 ($213). The median weekly income for a Grade A is £284 ($488) before benefits. Stable lads did not receive a pension at all until 1964. Until 1999, employers' contributions were £83 ($142) per year, and lads retired with a lump sum of £2,000 ($3,430). When it was discovered that some lads who had worked for more than forty years in the industry were paid a pension of £22.50 ($39) a month, and that those who had given twenty years received just £8 ($14) a month, the outcry was sufficient to prompt the introduction of an industrywide pensions scheme through the government's Stakeholder Personal Pension.[8]

This development has not met with universal approval, however, and one trainer complained that racing journalist David Ashforth's campaign for better pensions had "embarrassed the industry, especially trainers, and won the day. But did he actually do stable staff a good service? Most would, no doubt, have much rather had the extra money in their pay packet." Mark Johnston, perhaps the most articulate and forward-thinking trainer in the UK, criticizes Ashforth for restricting the stable staff's choices by making pension provision by their employers compulsory. He suggests that, instead, they should be able to choose between not owning a house or not having a pension. Ashforth's point is surely that lads should not need to make this choice.[9]

In the past, trainers physically disciplined unruly lads and insisted on the most arcane rituals in order to maintain an iron grip over their charges. One retired lad told me that when he was a young man in Newmarket his "guv'nor" would run a gloved hand over horses, stables, and equipment every evening, and "woe betide the one who had missed some [spot] and got the guv'nor dirty. A slap to the head. Just like that. Not a word. It wouldn't be allowed now, would it? But it kept us up to our work. He was fair, mind, the guv'nor. He hit all of us." Photographs of trainers and their staff from the nineteenth century and right up until the 1950s, in uniform ties and flat caps, sitting as they would for a school photograph, reveal the obvious truth that stables were hierarchical places of work, where obedience was demanded. Some trainers continue to foster the traditional attitude of their profession toward lads, whom they treat with barely concealed contempt. One told me that "the ideal lad is seen and not heard." Others may still be called the guv'nor, but they are respectful of their employees in the same way as might be expected outside racing. In general, however, relations between lads and their employers are notably antiquated.

During my fieldwork I experienced a political awakening of a sort, courtesy of a

horsebox driver who was transporting me and a mare I was looking after to visit a stallion down the road. When the driver asked who I was I murmured something about being an anthropologist, working in racing to try to understand the industry. He cut me off in mid-flow, saying loudly, "You're a shit flicker! Admit it! You're a shit flicker like me and like the rest of us in Newmarket, and don't try to dress it up! No, no, no. Look at you! You stink! Once a shit flicker, always a shit flicker." At this time, I was particularly interested in finding out what people thought about the Stable Lad's Association (SLA), the organization that represents lads to the rest of the industry. The SLA was universally derided among lads, and the national secretary, Bill Adams, was the butt of many jokes and a source of great resentment. As one colleague told me, "He doesn't represent us. We take care of ourselves. It is bloody annoying when he talks about things he doesn't understand. He doesn't even live in Newmarket! How would he know?" Adams's decision to live in Derbyshire, in the north of England, was seen by many of my informants as confirmation of his "outsider" status. They told me exasperatedly, "He may as well live on the moon!" More serious complaints have been raised by Andrew Appleby, a horsebox driver, who in 2004 alleged that Adams had failed to keep proper records of members and to send out sufficient notices of meetings or elections. Appleby invited stable staff to join a new trade union that would replace the SLA, with himself as temporary secretary.[10]

Appleby was responding to the new status of the SLA following the report of the Donoughue Commission on Stable and Stud Staff in June 2004, which cited the need for proper representation for the four thousand stable staff in the UK. While praising the "sterling work" of Adams, it went on to say that "in order to become a proper trade union, capable of adequately representing staff, the SLA should reform its structure and activities . . . The services currently provided are inadequate for the requirements of its members and the SLA needs to modernize." According to the British Horseracing Board's website, the SLA will soon issue a newsletter called "Stable Talk" and is receiving advice from a former Trade and General Workers Union official as to how it might best reform. Appleby continues to agitate in the racing press.[11]

Informants, including my own guv'nor, often explained the lad's working conditions as a result of the unchanging qualities of the Thoroughbred, telling me, "This is a job that involves an animal. And you can't tell animals that no one wants to work late or on Sundays any more. They don't understand that. You can't just leave a horse without water, because it can't go and do it for itself." The idea is that an animal cannot change with people's expectations. According to this argument, the horse does not offer flexibility of production because its basic unchanging needs must be met.

However, a comparison with the US suggests that many of the features of the UK system are based upon historical and social accidents, rather than on the racehorse.

AT HOME ON THE BACKSIDE

The backstretch or backside, the stable area behind the North American racetrack, is a unique, highly specialized zone, governed by complex social rules that produce a sense of unity among a group of people from a wide variety of backgrounds. The backstretch houses both racehorses and some of the people who look after them. Both inhabit much the same kind of accommodation. On a good day, for the insider, the atmosphere can be intoxicating. The sense of belonging and shared purpose makes work, however filthy or hard, seem fun. Long-standing jokes and flirtations ease the passing of the morning. The success or misfortune of any person may prompt concern or ridicule, but will never be ignored. Days pass in a buzz of excitement: new people, new horses, scandal, life and death, all in a tight little world where people have few outside interests but know everything about each other's lives. However, the people living and working on the backstretches of the US have been identified as the largest population of homeless working people in the country.[12]

When I first arrived in Kentucky, despite having worked with racehorses in the UK, I had no idea what to expect. I had booked a "horse country" tour that picked me up outside a hotel in Lexington, along with a number of other tourists, in order to get my first taste of the area. As we drove up to the backstretch in our minivan, the guide told us that this was a dangerous place and that it should be visited only during the day. The woman in front of me hugged her seatbelt a little tighter. This was not the first time I was to receive the advice of staying away from the backside after dark. As I looked out I saw a number of people holding horses on the grass, allowing them to graze in the warm afternoon sun. Behind them the barns were spread out, low-slung concrete buildings that resembled barracks, except for the washing that hung untidily from the eaves and the lines of shoes left out to dry in the sunshine.

With our guide in the driving seat, we swept through the backside as though it would be foolhardy to stop or even to slow down. As we passed through the exit gates, a splash of color caught my eye. At the end of one of the identical rectangular buildings, outside one of the rooms, was a small group of people of varying ages. I craned my neck to catch more detail. Each person had a napkin and a burger in one hand, a beer in the other. The group looked animated but relaxed, and I struggled to get a better view. The windowsills outside the room held flower boxes. A few more flowers grew around the base of the building. A child's bicycle lay on the ground.

Garden furniture in a variety of colors and styles was scattered around the grill. People were wearing shorts and work boots, baseball caps and vests. They seemed to be having a good time. I looked again at the guide and thought to myself that, despite his advice, I might dare to return to the backside.

In fact, I started on the front side the next morning, leaning on the rail and watching the horses training on the track. As is the case for anyone who chooses to adopt this posture for any length of time, I struck up several conversations, one of which led to an invitation to go racing the next day with a trainer. We went, had a brilliant time, and won our race easily. This gave me the immediate impression that my experience of racing in the UK, characterized by rain, mud, fear, and disappointment, was to be replaced by an altogether more successful experience here in the US. I was partly right. The first question people asked me was "Where are you from?" The second question was "Can you ride?" When I arrived in Kentucky I thought that I could ride, and I certainly had been riding in Newmarket, but by the time I left I had decided that discretion was the greater part of valor and responded to this question with a firm "no." The specialized track riding of the US was nothing like the riding I was used to on the Heath. The idea of being hurt and finding myself in a Kentucky hospital unable to afford to have my leg sewn back on was even more terrifying. Eventually, I came to the perfect arrangement, to ride a few (heavily tranquilized) racehorses but mainly a small, fat pony, who was universally unpopular but provided me with the perfect vantage point from which to observe all of the intricacies of the backside and the racetrack.

The people I met on the rail and on the backstretch all had stories to tell and were happy to share them with me. Hearing that I was writing a book seemed to encourage many of them. Leaning on the rail, or sitting on a horse for hours at a time, watching the world go by, produced an atmosphere akin to that of leaning on a bar or sitting on a particularly comfortable bar stool. The stories I collected reflect this atmosphere. One particular racetracker seemed so grateful that I was prepared to listen to him that he told me everything about his life as a Navy Seal and the bungled overseas operation that led to his discharge (not his fault), the amazing trip to Europe in a cargo plane that was carrying valuable bloodstock that ended in his having to dispatch a panicked yearling in midair (with a revolver), and his terrible experience of having to complete a complex surgical procedure on a horse when the vet suddenly fell ill. The exaggerated mobility and glamour of the racetrack, its associations with wealth and adventure, attracts interesting people with great tales to tell. The racetrack also encourages the attitude that what matters is that these things *might have* taken place, because in this context, stranger things have always happened. Authenticity rests in the telling of the tale and whether this is deemed a success or

not. To some on the rail this makes the backside a dishonest place. People are often described as hiding something, running away from something, or misrepresenting themselves in some way. The fluidity that proved to be of such great interest to me was given as the reason behind the first rule I learned when I entered the backside, "Never lend anyone money."

TRAINERS

Trainers, or "horsemen" (some of them women), are the managers and employers on the backstretch. On any backside there are trainers with one or two horses in their care and there are others with fifty, or who have a total string of up to three hundred dotted around the country looked after by local head men and women, called assistant trainers. The trainers I encountered were from all over the world and all kinds of backgrounds. They ranged from wealthy former English public school boys to men who had just been released from prison (banned from racing but training in secret). A number of trainers couldn't really afford to train horses and spent their days looking after their horses themselves and helping others out in order to earn enough money to pay for someone to ride their own. Other trainers worked for particular studs and had much more security, although they met with their own frustrations in that they had to make do with the horses they were given and could not recruit from other owners.

There are relatively few barriers to entry into the ranks of training in most states in the US. The test that precedes licensing is considered derisory, as the following exchange with a trainer indicates. I asked him to tell me about the trainer's test, and asked him whether it was difficult. He replied, "You could pass it! You know who runs the tests here? This guy! [points him out and continues to speak at a volume sufficient for him to hear] He gets run off for drugs, and what's his punishment for snorting at the track? Handing out the trainer's licenses! No one gives a damn about it! There aren't any real horsemen training around here. They're mostly gyps.[13] It's a disgrace." In order to train, an individual must be licensed by the state and be able to secure stalls from the racetrack, which are charged at a certain rate per stall. Competition for stalls is fierce at the premier tracks and can be a source of great tension between rival trainers. Stalls left empty are carefully noted by trainers eager to "get another one in." Those who leave stalls empty for any period of time will be "ratted out" by their rivals and told by the track authorities to either "use it or lose it." Cooperative trainers may help each other out with stalls without the knowledge of the track authorities, but empty stalls are still likely to cause disputes of some kind, since the space is a means of realizing wealth via either training fees or prize money.

Some trainers are known to protect their owners from the truth. One racing manager responsible for a string of forty horses with three different trainers walked into the barn one morning eager to share a story with me. He had been called that morning by the vet to say that one of their good horses had "done a knee" and that it would be on box rest for the foreseeable future: "What do you know but not more than five minutes later I had the boss on the phone telling me the trainer just called to say that the horse worked lovely and that he was looking good for next Thursday! The man has no shame!" Trainers may choose to put off telling their clients about injuries incurred by their horses, partly because informing the person who has placed a precious horse in your care that you have damaged it, and partly because this may result in the loss of the horse. Playing for time may mean that you can catch the owner at a better moment, or that one of his other horses may come good to soften the blow. More common is the thought that the trainer can somehow overcome the problem with the horse before the owner needs to know. This is of course a risky strategy, but it's something that most trainers are used to, brushing aside any concerns the owner might have by telling them, "Oh it's nothing, just a nick, she'll fix right up in a week or two."

On the backside, some of the trainers are indistinguishable from the hotwalkers and grooms they struggle to employ. Many work alongside their employees in order to reduce overheads, some even performing these roles for rival trainers. For these men and women, a sick or injured horse can be devastating. They are bumping along at the bottom, and their working lives revolve around hope rather than strategy or expectation. As one impoverished trainer told me, "I've got two in at the moment. One could be really good, you know. He's run second three times now, last time second at Ellis [Park], and he's been unlucky, you know. He came back sore all over and I'm damned if they know why, so he's in his box miserable with the world. The other one isn't showing a goddamn thing. I'm just waiting on him, I guess." This man supplemented his training activities by driving a horse van, delivering hay and feed, and doing "anything else that pays!" When he was at his lowest ebb he talked to me about changing his career, telling me, "I wish I'd've stayed in school. I could've always come back to this game. I'd've liked to get into computers maybe. But I thought I could make it. It's a young man's world. I was a young man myself then! You have to get lucky. Not one thing you can do to change that."

At the other end of the spectrum are the successful trainers or those lucky few who can rely on private wealth to support their lifestyle. Among these trainers something of the extravagance I had experienced among some of the breeding fraternity was in evidence. The most popular indulgence of the successful Kentucky trainer would seem to be the truck, the bigger and more powerful the better. Second to the

truck is the trainer's pony. In Britain trainers tend to ride retired racehorses, or "hacks," as they are called. By definition these animals are past their best and are expected to fade into the background. North American trainers told me that they would not be seen dead on these rejects, adding, "I'd rather eat that thing than ride it." The horses of choice among US trainers are the Quarter Horse, the palomino, the Appaloosa, or the paint. People feel strongly about these choices. In a heated conversation, one decried the Appaloosa: "I'd never have an Ap! I'd rather have anything else! See that fool over there? [points to a misbehaving horse] It's the Ap in him. He's got an Aptitude problem!" Another was equally unsure about paints (horses that have coats that are both colored and white, called skewbalds in the UK): "I'd never have a paint. Thoroughbreds just don't like them and you can't catch off of them. The horse is running and up comes a paint and he jinks just when you're reaching for him because he's got this funny horse half there and half not looming up on him and scares him half to death." On the other hand, to English trainers the choice of pony—whether paint, Appaloosa, or palomino—is too often simply "flashy" and therefore unseemly in a way that should be avoided at all costs.

The variation in the backgrounds of the trainers I encountered in the US can be attributed to the fewer boundaries that control entry into their profession, as compared to the UK. In the UK, until April 2006 when the Horseracing Regulatory Authority took over, the Jockey Club was responsible for issuing licenses to jockeys and trainers. According to rule fifty, the stewards of the Jockey Club had the right to "refuse to issue a trainer's license or permit to a person who, in their opinion, is not a fit and proper person to hold such a license or permit." In order to have an application for a license considered by the licensing committee, a would-be trainer had to have several years' experience on a successful yard, preferably as an assistant trainer, or have a successful record as a permit or point-to-point trainer. (Permit holders may train horses for their families only; point-to-pointing is a form of amateur racing.) It was necessary to gain a formal qualification in racehorse care and management (a National Vocational Qualification at level three) and attend three one-week courses at the British Racing School and a one-day seminar at Weatherbys, racing's bank and central administration. Applicants were required to provide references (personal and financial), a business plan, and proof of lease or ownership of a yard; they had to have at least three horses in training, a successful inspection by the Jockey Club, and an interview. Inasmuch as 95 percent of licenses applied for were granted, this was virtually a self-regulating community. According to rule two, licenses could be withdrawn at any point. The rules remain much the same under the new Horseracing Regulatory Authority.[14]

For some people eager to train this has provided a great incentive to move from

the UK to the US, where tests are minimal and stalls can be hired singly. Some emigrants from the UK explicitly rejected the class-based hierarchy they felt that these contrasting licensing arrangements reflected, telling me, "I couldn't stand all that stuff in England. You are what you are, y'know? Okay, I was [a groom] but I listened and learned and off I went. I couldn't have done that in England; I'd have had to get a place. Here there's virtually no capital outlay for starting up." In Newmarket, there are a number of interrelated racing dynasties whose names have dominated training since Edwardian times, as well as newcomers, some of whom make it and many of whom do not. In the US it seems that while Thoroughbred breeding, particularly in Kentucky, could be said to run in some families, this is less obviously true of training.

The most significant contrast between training in the US and the UK is in the relationship between the role of trainer and those of his employees. In the UK the work of the lad is constructed in opposition to that of the trainer. As one bloodstock agent who had come to work in the US from the UK told me, "The difference between the States and England is not better or worse. The main thing is this. Here, you can be anything you want by working hard. Attitude. Work up from being a stable lad because you go hotwalker, groom, exercise girl, and trainer—and have experience. In the UK you couldn't be a stable lass and go on. You really hurt your future by working as a lass. Here they think that's good experience. God Bless America!" As this woman indicates, in the US, the conventional route to training may include work as a hotwalker, before progressing to that of groom, perhaps to exercise rider and then to assistant trainer. Assistant trainers, especially those who work for respected outfits, can build up a reputation and client base while they work for someone else before setting out alone, ideally taking several of their former boss's clients with them.

In the US trainers may also serve an apprenticeship in Quarter Horse racing, where the overheads are even lower. Several of the most successful trainers in the US today came to Thoroughbred racing this way. Quarter Horse racing is not universally respected among Thoroughbred trainers, as one Irish racing manager working in Lexington revealed: "These new guys all come from Quarter Horse racing and they are trying to shorten all the races up. They go from the gate. Ping. Ping. Ping. And all the way to the finish. There's no pulling back. Settling. Get in a good position and finish. No strategy, nothing to think about. They just want them to finish so they can get an order. What do they shout? 'The four horse,' 'the six horse'—it's like greyhound racing." The disdain of this Irish commentator reproduces the separation between Quarter Horse racing and Thoroughbred racing that has been in evidence since the formation of the former as a sport and the latter as a test of breeding.

However, the techniques of the Quarter Horse trainers have proved to be so successful in the Thoroughbred business that many of them have become standard.

I don't mean to present Thoroughbred training in the US as some kind of meritocratic ideal. My own sense is that things are not quite that straightforward. The majority of the trainers I met were white, middle-aged men, and not everyone produced tales about how with hard work anyone can make it. One woman working for a famous trainer told me, "This is just an old boy's network. You know! Even the women! Some guy who is loud and obnoxious and, let's face it, a [. . .] useless trainer comes along and everyone swoons and takes him seriously! It's a joke. And then I come along and I'm meticulous and quieter and less prepared to put myself around at parties because I've got a sick horse at home to care for or whatever, and they're like, 'Oh hi. Whose girlfriend are you?' " A male assistant trainer told me, "I won't make it. I work hard but I'm not rich. I don't know any film stars and I don't like kissing ass. I've got a postgrad degree in equine nutrition, but that's not what they look for. They look for some rich [guy] who can talk to other rich [guys]." The conditions of entry may be different, but it is certainly not the case that anyone who wishes to can train in the US.

EXERCISE RIDERS

Exercise riders are fit and strong. They get the leg up each morning from the groom or trainer and take the horse around the track as it prepares for its races. As well as being fit, riders have to know when and how to speak to the trainer—diplomacy is almost as important as riding skill. Some exercise riders want to be jockeys, and some are jockeys who have retired or become too heavy to race ride. Although lightweight riders who are strong make the most popular riders, there are riders of most shapes and sizes. Some are tall and skinny. Others are tall and quite well built. Some trainers will not use these heavier riders, as they don't want to put undue strain on a horse on the track. Some trainers will use these larger riders if they have a difficult horse, which pulls or is unruly in some other way. Most trainers prefer exercise riders who are punctual and dependable to those who are not, regardless of their weight or skill. Having owners waiting in the stand, a horse ready to "breeze" (to put in a serious piece of training on the track), and no rider is acutely embarrassing for a trainer.

Exercise riders are very distinctive on the track. They wear body protectors, skullcaps, boots, and jeans and carry whips, often tucked in their back pockets, sticking up like aerials on a remote-controlled toy. In the summer they wear little but a shirt under their hot body protectors, jeans, and boots. In the cold weather they

wear gloves, earmuffs, face masks, and anything else they can lay their hands on. The majority of exercise riders do not live on the backside, but rather in the track hostel or in a trailer or mobile home on the racetrack grounds. Some share houses or apartments and drive to the track early each morning. If they are on foot, they are always in a hurry, rushing between barns looking for their next rides. They are either retained by a particular trainer to ride exclusively for him or her over a particular period of the morning, in which case they may receive a regular wage, or they freelance, in which case they are paid by the ride. Freelance riders turn up at the barn every morning asking the trainer if he has anything for them. The best riders are retained and also get spare rides at the end of the morning. The worst riders will usually find some nut case to ride each day.

The riders I talked to described a range of motivations for their chosen profession. In the States the role of exercise rider is already valued above that of groom or hotwalker, and so to a degree the desire to ride was seen as requiring less explanation than in Newmarket, where riding meant adopting the lowly status of the lad. In contrast, exercise riders loved to talk to me about the sensual pleasures of riding, as well as the financial possibilities it provided. For example, highly respected rider Elaine told me, "I'm single because no man can do anything close to what galloping a good horse can do for me. Oh yeah, it's a drug." Her colleague Xavier added, "I can get fifteen dollars for each horse I ride, and I can get on ten in a morning, then go to a farm and get on fifteen more. That's good money and it's none of it going to the government! Welcome to Miami!"

When I was in Kentucky, the thrill seeking of the male riders extended to taking part in rodeos, and in boxing matches organized at a bar in town. Watching riders at the rodeo was similar to watching them on recalcitrant horses, although the odds against their success in sitting the bull were greater. These men and women did seem to welcome risks, or at least to accept that it was a part of the job and that, if this was a scary thought (as it was to me), you were doomed. Elaine worried about me and told me, "You cannot be afraid. They know. I'm telling you they'll see straight through you to your yellow core and they'll try to get on you. They can see it, but they can feel it too, so it's no good getting on one of them suckers if you're scared. You just can't be scared ever. If something is coming up behind you and you feel your horse is tensing up. You gotta sit chilly." The association with voluntary risk taking and the suspension of reality extends to the use of recreational drugs by some riders, as Jeff, another rider explained: "Grocery shopping is boring. Period. Grocery shopping when you're high is fun. That's the rule and I ain't found nothing yet that ain't been made better by dope or booze. Same as riding."

GROOMS AND HOTWALKERS

The role of the groom is far less glamorous than that of the exercise rider, although many grooms may be just as skilled. Grooms are employed by a particular trainer, and they may be paid a regular wage. Some live in a tack room in the shed row, others in the track hostel, or in town. Those who live in the shed row convert tack rooms as best they can. Home comforts generally extend to a bed, a television, a refrigerator (often containing horse medicine as well as human food), and a hot plate. Some grooms put in fans and rudimentary air-conditioning systems. Some converted tack rooms are immaculate, others less so. None of them offers any facilities other than those available in the communal toilets and shower blocks, which can also be of variable standards of cleanliness. Grooms who live on site are able to be the first to start work, sometimes as early as four in the morning. They have to muck out their stalls and groom their horses in time for the arrival of the riders and hotwalkers.

Hotwalkers arrive after the grooms and exercise riders, since it is their job to walk the still warm horses after they have been exercised. The horse returns from the track, hot and sweaty, and is untacked in the stall. It is then put in a head collar and a shank (lead rein) and led around the shed row by the hotwalker until the groom calls it out to be bathed. After a shampoo bath the horse is once again led around the shed row to dry and "cool out." At a signal from the groom the hotwalker takes the horse to graze, for a period that extends until the return of the next horse from the track. Hotwalkers are the least integrated members of the workforce, though they may live on the backside. Some may be regular and salaried; others may be extremely casual. A lot of the hotwalkers with whom I worked were wives or girlfriends of the grooms who were working in our barn.

The structure of a typical day on the track is different from that of the training yard since many of the riders and hotwalkers ride or walk for several of the smaller outfits. Outfits are also less isolated than they would be if each occupied its own training yard. This arrangement often results in an atmosphere of mutual aid, as when trainers share ice machines or hoses. Where personalities clash or methods vary between two trainers in close proximity, it can create antagonism. In general, the sense in which "we are all in this together" is enhanced by physical proximity, the peculiar timing of the working day, the high maintenance requirements of all horses, and the separation of the backside from the outside world as a result of all of these distinctive features. Trainers in Newmarket who meet on the Heath as their string trains up a particular route (called a gallop) may pass the time of day together.

On the backside, however, trainers will borrow riders, grooms, hotwalkers, and equipment from each other on a regular basis. If someone is indisposed, others will rally to his or her cause, never knowing whether they might be next.

This idea of the racetrackers as an extended family is often reiterated, as expressed by exercise rider Xavier: "We're one big family here. Because you are always moving on. When people ship, you want to go, 'it's time to move on.' You just go to any racetrack no matter where, when you ship you know that it's time to see people you haven't seen for a while and say good-bye to people of the moment." Although this description of the mobility of the workforce of the racetrack sounds liberating, it is also one of the explanations for the insecurity of life on the track. Furthermore, families are hierarchical institutions, and the racetrack family is no exception. I was told off one morning by Jim, a fellow hotwalker, for questioning the behavior of my boss. Jim told me, "This here [the trainer] is the man. You keep out of his way if you can, and if you see him coming you turn tail and get the hell out of there. That's the only way. You hold your tongue. Ain't no way he wants to hear it from you. You try that and he'll kick your ass! That's it. You gotta learn, girl." Even though some trainers are more benevolent father figures than others, it is difficult to imagine any parent allowing its children to live in the conditions I observed on the backside. The idea that the backside is a family and that "we're all in this together" seems to ignore the fact that, while some people leave the backside at night, others remain.

Part of the attraction of my shed row lay in the destructive lifestyles of many of its occupants, some of whom would chug a beer before they began work at five or six in the morning. Arriving at the track to be greeted by people with alcohol on their breath, a cigarette in one hand, and a bottle in the other is partly exciting and subversive and partly depressing. During my time on the backside I worked alongside some people whose well-being was compromised by their life on the backside: men and women who were addicts of various kinds, who lived alone in filthy tack rooms, and who spent their nights drunk or gambling in the shed row, their days hotwalking horses if they could make it out of bed. I saw one of these women arrested for prostitution and possession, and she was dragged away screaming and shouting at the policemen, as she sometimes screamed and shouted at me. I saw old men in what could only be described as rags, walking repetitive patterns in the dirt, muttering to themselves under their breath, raging about some or another unresolved injustice in their life. I saw people fighting, men and women screaming at each other and grabbing at bottles of cheap booze, sending beer cans, cats, and cigarettes scattering all over the shed row. The sound track for these interactions was the track chaplain's sermon that was broadcast on the backside every morning, and regularly greeted by a single-finger salute from my busy colleagues.

LEGISLATION

Conditions on the backstretch have received most attention in California, where there are thirteen tracks and a large population of backstretch workers. The situation there is significantly different from the backstretches in Kentucky. A comparison between these two states raises many of the most important issues facing racetrack workers today. In 1985, the Immigration and Naturalization Services (INS) raided Del Mar in San Diego, after a television program exposed poor conditions on the backside. They discovered that nineteen trainers owed $241,243 in back pay to their grooms. Contrary to what one might expect, the money was not paid, and, through legislation put forward by Senator Ken Maddy, the grooms were reclassified as agricultural workers, able to work fifty-six hours a week without overtime. Maddy used the special status of the horse to justify this change, in much the same way as did the trainer I worked for in Newmarket. In California, grooms are the only employees who can work seven days a week, all year, without overtime. In 2000, the *Los Angeles Times* initiated an inquiry into the standard of living on the backstretches of California. What journalist Joe Mozingo found at Santa Anita, which had just undergone a $45 million refurbishment of the stands, was no different from the backsides I have visited in Kentucky, "a pueblo of more than 1,000 people, with goats and flies, dirt roads and characters that could come from a John Steinbeck novel—toothless old hands, hard drinking drifters and diligent family men far from their home soil." The key to understanding the conditions on the backstretch is the lobbying influence of the trainers and the horse and track owners.[15]

According to Mozingo, the industry spent $1.45 million on campaign donations and $1.15 million for lobbying in California in 1998. This influence contributed to the long-term exemption of the racing industry from labor regulations, including the payment of overtime, and from housing regulations. The industry provides the only living quarters that cannot be inspected by state housing officials. The responses of people such as Robert Tourtelot, defense attorney and chairman of California's horse racing board, to Mozingo's concerns reflects the affection for the status quo of those for whom it is directly beneficial: "'If somebody brought to my attention deplorable conditions, I would be concerned,' said Tourtelot, adding that he'd need a formal complaint before he would act." The men and women who live on the backside, many of whom are illegal immigrants, are unlikely to complain. When a bill to improve conditions on the backside was implemented in California, Assemblyman Alan Lowenthal (D-Long Beach), a coauthor of the bill, said, "With these measures, the worker will no longer live in squalor . . . Hopefully they will live as well as the animals they tend."[16]

The exemption from overtime was overturned in 2000, after thirteen years, and trainers in California were forced to pay out. In 2002, when faced with a bill that extended the right to union representation to backstretch workers for the first time, California horsemen formed the "Employee Education Association." The purpose of the association was to "educate the industry about what unionization could mean to horse racing in this state." Ed Halpern, executive director of California Thoroughbred Trainers, was concerned that the additional costs involved in employing a unionized workforce would result in trainers leaving California, already crippled by the costs of workers' compensation insurance. The cost of workers' compensation Insurance, compulsory since the early 1990s, had ballooned in the past three years, by 50 percent across the States, and by 200 percent in California. "Workers Comp" formed 30 to 40 percent of payroll on average in California, and 11 to 15 percent elsewhere, since in California, jockeys are employed by the trainer and are not recognized as individual contractors as they are in other states, including Kentucky, where some California trainers relocated. Halpern described the situation as follows: "Our major fear is that we're having enough trouble filling our fields in this state as it is . . . It wouldn't take all that much—maybe just a couple of trainers to decide to leave the state—to have a real crisis . . . We recognize that there are wage and hour issues, but we have a unique agricultural industry." He also noted that in three surveys by the trainers association the average groom made $17,000 per year plus a 1 percent cut of winnings, which averaged at $7,000, was covered by medical insurance, and qualified for an annual pensions contribution of $1,500. Not bad, he reasoned, "for a person usually with little education or experience who probably doesn't speak [English]."[17]

In Kentucky in 2004, only about one-third of the 1,500 licensed trainers claimed to have taken out workers' compensation insurance for their employees, and only 16.5 percent provided the accompanying paperwork. Exercise riders and jockeys, arguably the most vulnerable groups on the backstretch, are treated as freelance contractors. Some trainers with operations of twelve or more horses recorded no employees in their license applications. John Unick, vice president of MOC Insurance Services, the broker for California's insurance program, argues that this is because "the backstretch has been notorious in not reporting the payroll accurately . . . Trainers paid workers under the table and avoided paying premiums for those workers—while insurers' costs were much higher than expected." The backstretch is routinely dangerous, and many of my colleagues expected to suffer injuries. Between January 1999 and March 2004, 260 injuries were recorded at Keeneland, the training center in Lexington, Turfway Park, and Ellis Park. These were injuries reported to the ambulance services provided, and in my experience underrepresent

the true extent of injuries sustained. Racetrackers expect to get hurt, as Xavier explained to me: "If you ride horses you are gonna get hurt. I've broken bones, and some trainers treat you really well, others don't want to know. It's on you." If Xavier and others from Mexico were unable to work they had to either call upon their families for help with costs or return to Mexico in order to be treated: "I went home when I got hurt. In that time I had no income and my brother paid my bills, working for the same trainer I got hurt riding for." During their recuperation some stayed in the backstretch hostel, although one told me that he was asked to leave once he could no longer work after an injury. He simply broke in at night and slept in the kitchen.[18]

In 2004, exercise rider Clyde Bramble lost an arm when he fell from a filly at Turfway Park. His trainer had no insurance and his $172,000 hospital bill became the subject of a lawsuit. Bramble's case challenged a precedent set in 1976 when Joseph Mundy fell from his horse during a race at Churchill Downs and sued its owner and trainer. In February 1980 the appeals court dismissed his case, ruling that he was an employee of neither. Theresa Gilbert, a Lexington lawyer who represented Humberto Galindo, who broke his back at Keeneland in 1999, believes that the exceptionalism of the racing industry is untenable: "We protect every other worker in Kentucky, except these agricultural exceptions and a few other minor exceptions . . . I don't know that we have a valid reason for excluding the horse industry." The lawyer who acted successfully for the defense in this case called the lack of workers' comp among track workers in Kentucky the state's "dirty little secret."[19]

There are several programs that attempt to aid the backstretch workers. Winners Foundation, for example, founded by Louis Rowan, a Southern California owner, with money from the Oak Tree Racing Association, was established on the basis that "prior to 1985, backside people with drinking or drug problems were merely run off the track. We lost hundreds of really good workers whose rehab would have solved their problem and enabled us to keep quality workers in our industry." The emphasis of these programs is upon rehabilitation and physical well-being. The lawyer I spoke with who visited the backstretches in Kentucky advising workers on their rights and assisting with applications for legal residence in the US was disheartened by the lack of demand for his services. He told me that the workers he contacted were often most afraid of losing their invisibility to the state, the basis of their limited security. Many of the people I worked with were being paid a flat rate for a working day that could be up to sixteen hours long if they went racing away from the home track. For some this flat rate was less than $40 a day. The absence of proper records meant that hourly rates could not be calculated.[20]

The culture of the training stable and racetrack in both Newmarket and Lex-

ington is such that those who treat their staff reasonably are held up as examples that prove the integrity and self-regulating nature of the industry. In fact, "free" accommodation, bonuses, racecourse turn out prizes, and "presents" from owners are all mechanisms that preserve inequality. They are given at the discretion of the employer and presented as above and beyond their responsibility to their employees. Their distribution involves a kind of paternalism and capriciousness. The worker is treated as a dependent, like a child or a woman, by the employer who has the power to withhold or distribute his gift or by the racecourse that awards a "prize" for the tidiest horse. The gift or bonus is attached to a one-time event and is not to be regarded as relating to everyday work; the worker should not begin to think that his or her own work has any greater value because of it. The conditions experienced by the majority of racetrackers and lads are a direct result of ideas about who should pay for the cost of racing horses. The low wages of the backstretch are explained by trainers and racing authorities as the result of poor prize money and "wafer-thin profit margins." In this way the minimum wage, overtime, insurance, contracts, and pensions are presented as "extras" or "luxuries." It is difficult to see how improvements to working conditions for stable workers will be achieved under these circumstances. The next chapter explores the public face of racing in Britain and North America and analyzes the other major issues currently facing both nations: funding, medication, and competition from other gambling media.

CHAPTER EIGHT

RACING TODAY

Thoroughbreds and the relative merits of racing in the US and the UK were hot topics of conversation throughout my fieldwork, to the extent that I would dread being asked the seemingly innocent question, "Which do you think is better, American or English racing?" The problem was not initiating these discussions, but ending them. Fortunately, I am an anthropologist (what do they know?) and this enabled me to occupy the role of neutral referee when necessary. In an effort to broaden out this question I often asked people how they thought today's Thoroughbreds compared with those of the past. People were happier to share anxieties about their own Thoroughbreds when they weren't trying to establish their superiority to those of a rival nation. In Kentucky, the idea that England invented the Thoroughbred and America perfected it was popular, expressed in the notion "what you started, we finished." However, I was also told that the Thoroughbred was "not what it once was." In Newmarket, I was warned about repetitive sprint racing and the prevalence of "performance-enhancing drugs" in Kentucky, although English racing was seen as drastically underfunded compared to that of the US. The topics that were of most importance to my informants were the structure of funding, competition with other gambling media, breeding for speed, and medication. Some of the most interesting discussions involved people who were out of place: Europeans in the US and Americans in the UK. This chapter pulls together the insights of all of these groups in comparing British and North American racing and breeding. What future do these makers of racing imagine for their sport?

My decision to compare racing and Thoroughbred breeding in the US and the UK was prompted by the insistence of my informants that they were completely

different, in ways that reflected important contrasts between the two nations. American racing professionals repeatedly told me that they were free from the class restrictions that dominate racing in Britain. In certain ways this proved to be the case. I was encouraged to dress down for racing, to the extent that one trainer phoned me the night before we were to go racing together for the first time to remind me to dress casually, saying, "No frilly dresses or big hats, Rebecca. This isn't Ascot!" I met all kinds of people from different backgrounds as I wandered around the tracks, from trust fund babies to people who had started with nothing and made a fortune. However, as the previous chapter has shown, despite the range of different entry mechanisms, breeding and owning Thoroughbreds in the US is primarily the preserve of the wealthy, and looking after them is still the job of the least powerful members of society.

In the UK, informants claimed that their racing was the most authentic in the world and had preserved the concern with improving the Thoroughbred that had been enshrined in the earliest rules and orders issued by the royal patrons of racing and by the Jockey Club. As evidence of this they pointed to two factors. The first was the variety of racecourses in the UK and the varied distances over which horses ran. This variety preserved a degree of diversity within the breed that had been lost in other countries where speed had been allowed to dominate stamina and robustness. The second indication of the authenticity of racing in the UK was that horses ran and trained without artificial stimulants of any kind. In both cases, informants emphasized what they referred to as "sport," in contrast to the commercial motives they saw at work in the US. Racing in the UK combines both commercial and sporting aspects, and the contrast drawn between the US and the UK is not so sharp as either group imagines.

DIFFERENCES

There are 175 racecourses in the United States. Thoroughbred flat racing (as opposed to races between trotting horses) takes place at about one hundred of these. In the United Kingdom there are 59 racecourses. Seventeen of them stage flat racing only; twenty-four run only jump races. Eighteen stage both. There are four all-weather tracks (AWT), similar in construction to tracks in the US. Great Leighs, an AWT just outside London, is the first new racecourse to be built in the UK since 1927. The US holds the most flat races of any nation: 51,668 in 2006, more than twice as many as Japan, the nation in second place. These races were organized by 137 separate authorities. In the UK, 8,934 races were run, all organized by a single authority, the British Horseracing Board (BHB). In 2005, prize money was $1,262.3

million in the US, and just $240.4 million in the UK. Average prize money per race was $24,430 in the US and $26,908 in the UK, though training costs are very different. In 2004, Britain ranked thirty-ninth in the league table comparing owner outlay with returns in prize money, behind Cyprus (eighth), Mauritius (ninth), and Peru (sixteenth). The fact that 28 percent of owners' outlay was recouped from prize money is seen by most commentators as resulting from the high costs involved in running a training stable, rather than low prize money. Training costs are lower in the US, where 52 percent of expenditure on fees is available in purses.[1]

As indicated in chapter 6 in relation to the purchase of bloodstock at auction, the possibility of making a profit from racing is influenced by the prevailing tax regime. In the US, racing losses can be offset against income from other sources as long as it is treated as a business, which at present means that it must show two years of profit out of every seven. In the UK, value added tax on racing expenses can be reclaimed on the understanding that owners attempt to secure sponsorship for their horses, an arrangement that is worth £22.2 million ($38.7 million) to the industry, and is under review. Until it was withdrawn in December 2005, Ireland possessed the most favorable tax regime for racehorse ownership and breeding, with a zero tax rating on nomination fees in place since 1969.[2]

Many differences between racing and breeding in the US and the UK are matters of emphasis rather than substance. The greatest differences lie in the structure of funding and administration. Until 3 April 2006, racing in the UK was run by the Jockey Club and the BHB and funded by a tax on bookmakers' profits. The Jockey Club has since handed its responsibilities for security, discipline, licensing, and the conduct of a day's racing to the Horseracing Regulatory Authority (HRA). The BHB remains the governing authority of British racing and is responsible for the fixture list, race planning, employing handicappers (the people who decide the weights to be carried by each horse in a race), marketing, training, finance, strategic planning, and liaising with the betting industry, the government, and overseas authorities. The BHB was established in 1993, fifteen years after the Royal Commission on Gambling called for the creation of an independent racing authority. It emerged with support from the senior steward of the Jockey Club, Lord Hartington, who oversaw devolution and stood as the first chairman. Many of my informants saw the creation of the BHB as a necessary part of the reinvention of racing as a leisure industry. One veteran trainer told me, "They [the Jockey Club] were quick to impose fines and such, but we were looking for leadership. Someone who could unite the industry, not look down on it from a distance." The Jockey Club had run racing for 241 years. Some members insisted that it continued to do so and that the responsibilities of the BHB were created by the (undesirable) transformation of racing from a sport to an indus-

try. As one traditionalist told me, "The Jockey Club had to be seen to be giving up powers when it did. You had to let Johnny public know that racing wasn't run by a bunch of old boys any more. But not so much changed as you might think. The Jockey Club 'gave away' things it had never been responsible for in the first place." Full devolution of all of the Jockey Club's powers to the HRA occurred in 2006, for reasons that will be described below. In the future, the Jockey Club will concentrate upon the management of thirteen racecourses and the estate in Newmarket, its 250-year reign over British racing finally having come to an end.

In the US there are federal organizations but also 137 state authorities organizing racing. The American Jockey Club, for example, is responsible for the maintenance of the American Stud Book, which records the breed in the United States, Canada, and Puerto Rico. The day-to-day organization of racing is the responsibility of state-wide organizations. Racetracks in the US vary in importance, from the premier tracks of Churchill Downs and Keeneland in Kentucky and Saratoga in New York State to the so-called bush tracks such as Kentucky Downs. The better tracks attract the bigger purses and the faster horses. Some tracks in the US, for example Aqueduct in New York, race for more than six months of the year. Racing is funded from the pari-mutuel, a pool betting system operated by the racecourses themselves, the only legal form of gambling in the majority of states. The large number of racing authorities and, in particular, the lack of a single policy on medication were of great concern to the group of handicappers (gamblers) I hang out with at Keeneland. They argued that form in one racing jurisdiction under one set of rules would not translate across states, making it more difficult to pick winners. Standardization in this area is a highly contentious issue.[3]

The two different funding structures are related partly to the scale of racing in the two nations and partly to their distinctive administrative histories. The variety of formats taken by racing in the UK was gradually eroded by the dominance of the Jockey Club. In the US, Quarter Horse racing, trotting, and pacing have survived alongside Thoroughbred racing, and racetracks are independent commercial entities with their own products. In the UK, until recently, all fixtures were distributed by the BHB and racecourses were forced to promote their existing races, or to lobby the BHB for more. In the US, they simply produce more of whatever the handicapper requires, in order to maximize the size of their betting pool and thus their cut. In part, this maximization is based upon an increase in the number of races per day, and so it impacts upon the Thoroughbred. Racetrack owners and many racehorse owners want their horses to be able to run as frequently as possible. In the US this has lead to a dependence upon therapeutic medication. This is perhaps the greatest contrast

between the two nations, and it is the subject of a great deal of conversation by racing professionals on both sides of the Atlantic.

CHANGES AFOOT

Racing in Britain is currently going through a painful transformation. In 2001, a combination of bad weather and an outbreak of foot and mouth disease forced the cancellation of a record number of race meetings (228). This accelerated the policy of diversification already being pursued by off-course bookmakers eager to encourage punters to bet on cheaper gambling media such as foreign racing, football, and slot machines. A combination of these factors reduced racing's share of the betting market from between 70 and 75 percent in 1999 to 58 percent (less than 50 percent in the case of some bookmakers) of gross profit in 2003.[4]

In 2002 two television documentaries, *Kenyon Confronts* and *Panorama: The Corruption of Racing*, exposed practices within racing that were widely perceived to be contrary to the public interest. *Kenyon Confronts* was primarily an exposé of the practice of running horses under conditions that do not suit them in order to misrepresent their ability so that they might have a better chance, at a lighter weight, and at greater odds, the next time they run. *Panorama* included a statement attributed to the former head of security at the Jockey Club, Roger Buffham, in which he described racing in England as "institutionally corrupt." As the racing establishment struggled to recover from this damaging publicity, the Office of Fair Trading (OFT) launched an investigation into the Orders and Rules of Racing and found them to be in breach of the Competition Act of 1998. The OFT describes itself as "responsible for making markets work well for consumers." The OFT reported in April 2003 and issued a warning, described as a Rule 14 notice, against racing. In particular, it called into question the right of the BHB to control the fixture list, to set the amount a racecourse must offer an owner to enter his or her horse in a race, and to monopolize the supply of race and runners data to bookmakers.[5]

Meanwhile, in the United States in 2003, the fiftieth Annual Round Table Conference, hosted by the American Jockey Club in Saratoga, concentrated on three burning issues: recruiting new owners to the sport, the nationwide unification of medication regulations, and the possibilities of global wagering opportunities. These three issues are connected through the racehorse. In the US, it is widely (though not unanimously) perceived that the Thoroughbred is declining in quality and resilience. Some attribute this degeneration to veterinary intervention and the use of steroids and anti-inflammatory drugs on the track and in the breeding shed. Others

see the aggressive policies of commercial breeders as the problem; some blame pollution. The perceived degeneration of the Thoroughbred is connected to the loss of market share by racing at the expense of other forms of gambling such as riverboats and casinos, through the failure of the industry to produce real champions. Horses that are either so fragile or so valuable that they are only permitted to run six times during a two-year career cannot command the level of support that a consistent and tough individual capable of running forty times over four years can attract. The opportunity created by the massive popularity of the book and film *Seabiscuit,* for example, was widely perceived by my informants as being unrealized because of the absence of personalities (both human and equine) in the business.[6] Despite the best efforts of the National Thoroughbred Racing Association (NTRA), formed in 1998 in order to arrest racing's decline, audiences remain derisory in comparison to those of the big three: football, baseball, and basketball. With the possible exception of one day a year, racing is not a sport that constitutes part of the US's image of itself. Specifically, my informants reflected upon the fact that if the economy is perceived to be weak, or the world unstable, people do not seem to want to become racehorse owners.

GAMBLING ON RACING

Racehorse owners and "punters" (UK) or "handicappers" (US) make the greatest net contribution to racing. Although it is difficult to assess accurately, according to the American Jockey Club the annual aggregate pari-mutuel handle on Thoroughbred races in North America is now more than $15.8 billion, $1.2 billion of which is returned to racing as purses. In the UK in 2004, £10 billion ($17.5 billion) was bet off course in Britain's 8,500 licensed betting offices, as well as £120 million ($210.6 million) bet on course with racing's own pool betting enterprise, the Tote. Gamblers pay for the right to bet on horse racing by betting with bookmakers at odds that reflect a deduction paid to racing's governing bodies (UK), or through the take out from the pool that is paid to the racetrack (US). The majority of bets placed on and off the course in the UK are made at starting prices (theoretically determined by the weight of demand on track), with bookmakers. A minority is made with the Tote, the profits of which return to racing. In contrast, in the US all legal bets placed at the track are through the pari-mutuel or Totalizor system. A fixed percentage (between 14 and 25 percent) is extracted from the pool to cover the operating expenses of the track, the purses, and state and federal taxes. The remainder is distributed between winning punters.[7]

Punters and owners both demand fairness in racing as a basic requisite for their

participation. "Institutional corruption" deters owners who may feel that horses are not competing on their merits. Similarly, suggestions of corruption or the use of undetected medication discourages punters or handicappers, who feel that they have been cheated out of their winnings. The whiff of corruption angers both groups in a way that the ordinary odds do not. The question remains: what is fair? Would one group of racing's consumers necessarily agree with the arrangements preferred by another group? Whose interests are put first? How do institutional arrangements reflect these priorities? How do the demands of consumers affect the producers of racing? What is the effect of pressures from consumers on the horse population and on each horse individually? What kind of society produces racehorses and horse racing of the kinds found presently in the US and UK?

In 1927 Lord Hamilton of Dalzell was appointed senior steward of the English Jockey Club and almost immediately instigated an investigation into "the means by which betting may best be made to contribute to the maintenance of the sport." In 1928, as a result of Dalzell's campaigning, the Tote was created. However, the strength of the existing bookmakers lobby and a strong preference for fixed-odds betting (where returns are calculable in a way that they are not when betting in a pool) among the gambling public ensured that the Tote would never challenge the bookmakers for dominance in the UK betting market. In the 1950s the Betting and Gaming Act, the first attempt to extract a price from bookmakers for the right to bet on racing, was put to Parliament. Off-course betting (betting anywhere other than at a racecourse) was illegal at this time, though flourishing.

The Betting and Gaming Act of 1960 legalized off-course cash betting and the Horserace Betting Levy Board (HBLB) was established to collect and redistribute the betting income from the bookmakers back to racing. By 1963, 14,388 licensed betting offices had opened in the UK. Prize money was created via a deduction either from wager or winnings. In 2001, deductions totaled 9 percent, 6.5 percent of which went to the government as betting tax, 1.75 percent of which went to the HBLB (the deduction was "rounded up" from 8.25 percent to 9 percent by bookmakers). Betting tax was abolished from 1 January 2002 and replaced by a deal between bookmakers and the BHB based on the sale of data rights that generated £120 million ($212.4 million), at a time when only £70 million ($123.8 million) was available through the levy scheme. The Tote was to be sold to the Racing Trust, a consortium including the BHB in 2003, but the European Commission (the legislative body of the European Union that governs competition laws between and within member states) launched an investigation of the sale, believing it to be in breach of State Aid Rules. In 2005, the Tote was granted a seven-year monopoly over pool betting in the UK.[8]

In June 2004, the BHB issued "The Modernization of British Racing," a document that responded to the concerns of the OFT and provided a blueprint for the future funding of racing based upon the sale of race data (runners and riders, weights, and other essential details) to bookmakers. This move was intended to create a commercial relationship between racing and bookmakers, to replace the existing arrangement that involved the government as a third party. In November 2004 the European Court of Justice ruled that bookmakers William Hill could not be denied access to the BHB's database, and this plan was thwarted. In 2005, the levy, set at 10 percent of bookmakers gross profits, was extended to 2009, by which time the government expects racing to have come up with a replacement. In 2005, Richard Caborn, Minister for Sport, said that "the Government remains committed to ending its financial involvement in racing. The extension is conditional both on racing's continuing modernization and on its commitment to explore commercial alternatives to the Levy." The future funding of racing in the UK seems likely to be based upon the sale of television pictures to bookmakers by racecourses and a new organization called the Horsemen's Group, which includes the racecourses' and trainers' professional associations.[9]

The funding of racing has always been far less complicated in the US, owing to the relative insignificance of bookmaking. In the US, bookmakers were banned in Kentucky in the early part of the twentieth century, and other states (except Nevada) gradually followed suit, leaving the pari-mutuel system in their wake. New York was the last state to adopt pari-mutuel wagering in 1940. Off-track wagering has traditionally proved highly controversial with state legislators, a political "hot potato." The first off-track betting facilities in New York went into operation in 1971 amid protests. Off-track income far outweighs that of on-track wagering under this system. Kentucky legalized off-track betting in 1992, in the face of competition from Indiana's riverboat casinos. Between 1993 and 2003 Kentucky's four betting "parlors" handled $313 million and contributed $19 million in purses (prizes for racing). The sale of pictures to simulcasting facilities both within and outside the state also contributes to the purses of all racing jurisdictions. Faced with intensifying competition from other betting media, several states introduced slot machines on their racecourses, and tracks like Delaware Park (Delaware), Charles Town and Mountaineer Park (West Virginia), and Prairie Meadows (Iowa) now generate more revenue from slots than they ever did from wagering. The racing is a sideshow, and if they lost the slots, the tracks would shut. The latest alternative to wagering at a local track is the interactive technology of the TVG network that offers the handicapper the opportunity to watch and wager on races from all over the States without leaving his home. The TVG network depends upon the integrity of racing as a wagering medium to

attract customers. The greatest concern of every racing nation is to protect the image of the sport for the sake of punters and other investors. The globalization of the betting industry via internet technology has created a market worth an estimated £1 trillion ($1.75 trillion). In this market, fairness or integrity is valued above price, and the market leaders are those who can assure punters that when their money is down, the best horse will win. This connects the governance of racing and the maintenance of the Thoroughbred to the financial health of the sport.[10]

INFRASTRUCTURE

One of the most striking differences between racing in these two countries is the physical environment in which it takes place. When I talked to North Americans about the differences, the most frequent response I received was, "You guys go the wrong way!" Not simply the *other* way, you'll note, but the *wrong* way. The idea was reinforced when I was walking along with a group of bugs (apprentice jockeys) in New Orleans. I had bashed into a number of pedestrians coming in the other direction before they dragged me over to walk the other side of the sidewalk, laughing at me and saying, "You don't just go the wrong way, you even walk the wrong side!" "You go the wrong way" always surprised me, partly because it was such a consistent response, and the concept obviously forms part of the self-image of the American fraternity ("we go the right way") and their image of the UK ("Pah! They go the wrong way! Can you believe it?!"), but also because it is wrong.

Racecourses in the UK go both ways. More accurately, they go in all directions. Some are simply straights that can't really be said to go in any specific direction (Newmarket), and some are figures of eight (Windsor), which really do go both ways. There are ovals of both directions (Ayr—left-handed, Edinburgh—right-handed). There are triangles (Ascot—right-handed, Lingfield Park—left-handed), U-shapes (Epsom—left-handed), pear shapes (Doncaster—left-handed), and circles (Chester—left-handed and, at a few yards over a mile, the shortest circuit of any flat course in Britain). Some racecourses are wide, a "galloping track" (York); others are "trappy" and narrow (Chester). Some are flat (York); others are undulating (Folkestone). Some have unique topographic features that come to be particularly associated with the style of racing that takes place at that course. The uphill finish at Cheltenham tests a jumper to its limits; the uphill finish at Newmarket is a similar test of the stamina of a flat horse. The initial climb and the downhill finish, along with the distinct camber, of Epsom make the English Derby a unique test of a racehorse's balance and soundness, one of the reasons why it remains the ultimate test of a champion. In the UK, trainers maintain that particular horses are suited to different

conditions. Some prefer to go right-handed, some left-handed. Some are inconvenienced by undulations; others cope better and so enjoy an advantage over their less-coordinated opponents.

Turf tracks are valued for their unique qualities, thought to provide opportunities for horses suited by a range of conditions: undulating or flat, narrow or wide, turning or straight. This reflects the variety of racehorses produced by the European breeding industry and is intended to offer the owner of each horse of every kind the opportunity to win a race. During my fieldwork in the UK, many punters also valued this diversity, and they explained that they preferred the complexity of racing that takes place upon a variety of surfaces and under a number of different conditions to the standardization of the AWTs, to the extent that some would not bet on all-weather surfaces. "I hate the dirt. It's boring. It's for people who don't like horses and aren't interested in the game at all," they would say. The most popular betting races in the UK continue to be the Classic and Group One races, the most prestigious of the racing year, all of which are run on turf.[11]

In contrast to the eccentricities of the British model, the majority of US racecourses are standardized in shape, distance, and surface. Some contain a turf course inside (Keeneland) or outside (Santa Anita) the dirt oval, but the vast majority of racing takes place on the dirt. Described as "merry-go-rounds," what they lack in character they make up for in consistency. Dirt tracks were not constructed to enable racehorse owners to determine which of their horses was fastest and should therefore be mated to their best mares. They were built so that a group of horses might be put together in a race, all starting from the same point and therefore running over the same distance, all visible at all times and producing a set of timings that will enable the performance of each to be compared to those of the other horses they will run against in future races, regardless of whether they have met before. This places an emphasis upon speed. Short races reduce the importance of tactics and positioning. Currently, more than 49 percent of races in North America are six furlongs or shorter. They are also run at a completely different rhythm compared to races in the UK or on the Continent. In the US, horses bounce out of the gates and run to the line. Some horses may be "closers" (come from off the pace), some may be "front runners" (attempting to lead the pack from start to finish), but these tendencies are far less pronounced than they are in the UK, where the horses have farther to travel and more varied terrain to cover.[12]

The emphasis upon uniformity in the US created a drive toward technological innovation. Starting stalls and electronic and sectional timing were established there decades before their gradual and uneven adoption in the UK. Stalls have been standard equipment on American tracks since the 1930s, but they were not intro-

duced to the UK until 1965. Electronic timing was not available at all the British flat racecourses until 2003. Also in 2003, Newmarket was the first racecourse to install sectional timing, more than half a century after this equipment had been standard at tracks in the US. The technology of the dirt track reproduces and reflects the interests of the gambler; racecourses in the UK have preserved the concerns of owners and breeders, but they also reflect the preference of British punters for racing that takes place over a wide selection of distances, on a variety of surfaces and terrain.

North American dirt tracks have initiated a search by handicappers for more consistency than afforded by just shape and distance. These handicappers also want conformity in the surface in order to wager. Track owners, dependent for prize money on the take out from the pool, are finding that unless the track is running fast, handicappers will take their gaming dollars elsewhere. I have already said that very few people go to insignificant local meets in the US in the way that they do in the UK, to enjoy a spectacle, to dress up, and to be entertained. Few of the handicappers I encountered at the "bush" tracks were interested in leaving their air-conditioned spot in simulcasting to go and look at the horses they were about to stake on. As my gambling companion Trip told me when I suggested that we go outside to the paddock and look at the horses, "Are you kidding? I sit there, on that stool. I go to the bathroom, third stall from the right. I maybe visit with a buddy. This is my office, my place of business, this booth, everyone knows that. I couldn't give a damn what the horses do in the paddock." Trip and his colleagues explained to me that what mattered to them was that the horses they were betting on were going to be running over a particular course and distance in standard time: "You gotta look for a post that's running true and stick with it. I get good at a particular place, but I won't touch it if it's an off track, or, you know, or if it's running slow. Everything goes to hell!" In order to attract the largest volume of bets, a track must provide a consistent surface on which to race. In practice, this surface must be consistently fast. This standardization requires the intensive veterinary management of the Thoroughbred that I will describe later in the chapter.

Differences between UK and US racecourses are significant. They make the different origins of these arenas very clear. They also reflect the difference in the balance in power between the betting public and the racehorse-owning minority of the two nations. The flat dirt oval is an arena designed to facilitate action that takes place under the noses of spectators housed in covered stands. The US racing experience makes it difficult to explain how to watch the English Derby to an American guest. It sounds crazy to say, "Well, you stand here and wait for the commentator to say that they're off, then you wait for a little bit before they appear around that bend and then cheer them to the finish." Racing in the UK was designed to test the

breeding of horses rather than to facilitate gambling. The majority of courses were designed when races took place between two horses and were tracked on horseback or in carriages by the owners and their friends.

A survey by the BHB in 2003 found that, of the fourteen million adults who have bet in the UK, just under nine million have bet on horseracing, one-third doing so once a week or more and accounting for 90 percent of horserace betting, with an average spend per week of approximately £50 ($88). In 2004 a government survey found that 11 percent of the three thousand people asked had bet on a horse race in the previous twelve months, more than had spent money on any other form of gambling except the National Lottery (61 percent) and scratch cards (16 percent). These figures struggle to capture the place of racetrack gambling in the UK, where punters in betting shops and on courses are interested in the individual horses and conditions in a way that was not so apparent in the US. A punter at Newmarket told me, "I'm interested in the horse, not just the race and the outcome. I would never call a horse 'the number six' or whatever. When you talk about a horse you want to let people know you've got something interesting to say." The presence of betting shops on the majority of high streets (main streets) in the UK reflects and reproduces the community of people who take an interest in horseracing and are regular gamblers.[13]

Betting on horseracing in the United Kingdom is a part of public life, in a way that it is not in the United States. This interest involves not only the experience of betting but also a connection with racehorses as individuals, as the recent coverage of the death of Best Mate, a champion steeplechaser, made clear. Best Mate died of heart failure on Cheltenham racecourse in November 2005 and was depicted on the front pages of every national newspaper, broadsheet, and tabloid the next day. Racing in the UK is covered by the BBC and Channel 4 (an average audience for racing on BBC One is 1.3 million people) as well as two dedicated digital channels, and the sport receives coverage in each of the daily national newspapers every day. Nine and a half million people watch the Grand National, the most popular race over jumps in the calendar, and 3.2 million tune into the Epsom Derby. Over six million people went racing in the UK in 2004. Many early morning news shows, including the Today program on BBC Radio Four (which offers political commentary on the day), also provide a daily tipping service. Some of these are more reliable than others.

FIXTURES

The BHB would argue that one of the reasons for the continuing popularity of racing in the UK is their judicious management of the fixture list, the annual distribution of race meets. The fixture list was the golden thread by which the BHB

exerted its control over the entire racing product and in doing so created the demand to which the European bloodstock industry responded. Until 2005, the BHB determined the quantity and variety of racing that took place each day in the UK. The fixture list changed little each year (barring the creation of Sunday racing in 1995 and the expansion of evening racing), and it was devised with a number of priorities in mind. In particular, when one racecourse was racing it would be the only one within a fifty-mile radius assigned a meet for that day. The intention was to provide an opportunity to race for each of the main centers of racing in the UK on any one day, in particular to provide opportunities to race in both the north and the south. This arrangement created remarkable stability in racecourse provision. There have been fifty-nine courses in the UK for decades, since each was guaranteed a certain number of days' racing each year regardless of the popularity of the track with racegoers, punters, trainers, and jockeys. Preserving the less popular racecourses was one of the principles behind the creation of the fixture list. In 2005, following the OFT ruling, the fixture list was opened to commercial pressures for the first time: 183 fixtures were auctioned by the BHB to racecourses. As a result the fifty-mile rule was broken, and some fixtures will compete with their near neighbors. At the same time some "nonessential" orders of racing were relaxed. *The Racing Calendar* of March 2005 allowed racecourses to stage as many of the lowest grade of race as they please, raising fears among trainers that the standard of racing would fall.[14]

Some racecourses welcomed the investigation of racing by the OFT and have even been blamed for initiating the process. They believed that it offered them an opportunity to break out from centralized control and to set their own racing schedules, attracting owners by providing good facilities and competitive prize money, while at the same time providing bookmakers with competitive racing. Racecourses represent vast capital investments that stand idle for the majority of their nonracing days. For racecourses that attract good crowds and good racing the OFT ruling offered possibilities for increased profits. For those courses that rely on BHB subsidies in order to stage racing the future is bleak. Many of the racing administrators I consulted were adamant that the variety of racing in the UK makes it more interesting for punters and will ensure its popularity over and above standardized alternatives (read: American racing). The OFT ruling has initiated the greatest changes yet in the roles of the BHB and the Jockey Club as mediators between demand, in the form of wagering, and the suppliers of the racing product.

In the US, in contrast to the control of the fixture list by a single authority, there is a two-tier system. The American Graded Stakes Committee (hosted by the Thoroughbred Owners and Breeders Association) was formed in 1973 and grades and distributes 486 races. The purpose of the committee is to "maintain the integrity of

the sales catalogue page, and thus the breed." Additional racing provided by each track is a reflection of what people want to bet on and where people want to run their horses. The tracks can award as much prize money as they like for races run over any distance by horses that qualify under any set of conditions, provided they can raise the income to fund the purse and attract the runners. Under this system alternative forms of gambling have proved highly competitive, and slot machines, lotteries, and casinos are now features of many racetracks. While racing at Kentucky Downs, for example, I experienced two entirely separate worlds. The brand-new, air-conditioned gambling emporium just off the highway, and the falling-down bleachers occupied by the proverbial one man and his dog, five hundred yards further down the road. The racing took place on a turf course, a great novelty for me, and better still, we had a winner. However, this was of no interest at all to any of the lottery players to whom I spoke. In regulatory terms, the casino was made possible by the racetrack. It was clear that the casino dominated the track in every other sense. The problems and opportunities facing the industries in the UK and the US are different. Demand for racing is less elastic in the UK, where it is based upon a connection with the sport that transcends its role as a gambling medium. However, the industry must compete with bookmakers for its slice of the profits. In the US, training horses is cheaper, and profits are not shared with bookmakers, but other sports and alternative forms of gambling are more popular. These contrasting situations are reflected in the relative importance of medication to the two racing nations.[15]

MEDICATION

The practice of training racehorses is contrary to the idea of breeding them. If Thoroughbred horses are fast by virtue of their "blood" and, in the case of American-born Thoroughbreds, their Blue Grass upbringing, as my informants told me, then what does a Thoroughbred trainer do exactly? Some traditional trainers engage with this paradox head-on and say that they do not in fact "train" horses at all. As an Irish trainer working in Kentucky told me, "We don't train horses. This isn't the circus!" Training an apparently naturally talented animal is somewhat paradoxical, but most trainers engage with an idea of "adding value" that allows them to describe their own activities as complementary to those of the breeder. This idea involves enabling the horse to express its "natural" talent. The idea of the trainer as a facilitator is most evident among trainers in the US, where the scope for intervention is much greater than in the UK. The conceptual limit to this intervention is drawn between "performance-enhancing" and "therapeutic" medication (although individual horsemen will draw this line in different places). When I asked a horseman in the US what drugs he used

on his horses, he told me, "I don't use drugs. None of us do. Our horses get their medication, though. We aren't barbarians. If you have a pain, you take an aspirin. These horses are athletes, and their bodies are under a lot of pressure, so they need an aspirin too."

Medication is itself merely a rather singular form of technology. In the UK, the veterinarian is restricted by the rules of racing to prescribe only those drugs that are permitted by the central racing authority. The British Jockey Club's statement on medication in racing was unequivocal. Drawing explicit attention to contrasts with practices in the US, it stated that "with the exception of racing in the USA, where many states permit the use of substances such as bute (painkiller) and Lasix (stops internal bleeding), all recognized racing countries aim to run their sport completely drug free. In recent years several European racing authorities—primarily Britain, France and Ireland—have sought to harmonize their drug testing procedures so that whichever country a horse runs in, its dope testing sample receives exactly the same treatment." The HRA has dropped this wording, saying instead that its "very broad definition for a Prohibited Substance . . . reflects the determination of virtually all racing authorities to ensure that horses run free of the effects of any drugs. It includes all drugs, and many supplements, whether they are of natural origin or not." According to the HRA website, Jockey Club officials took samples from 8,816 horses in 2002 (approximately 10 percent of runners) to be analyzed at the Levy Board's forensic laboratory in Newmarket. The number of positive test results returned was 0.13 percent.[16]

In the US at the present time, rules concerning medication vary between states. In 1999, Kentucky was the last state to ban "milkshakes," a sodium bicarbonate–based mixture administered via a nasogastric tube before a race. When I arrived in 2001, Kentucky had the most liberal rules regarding drugs of any state of the US, allowing fifteen drugs to be administered up to four hours before the race. A New York trainer told me at the time that "in Kentucky there are only two kinds of people: cheaters and losers." State racing officials reduced the number of race-day-permitted substances from sixteen to five on 24 September 2002. At this time, horses were able to receive no more than two nonsteroidal anti-inflammatory drugs; no more than one steroidal anti-inflammatory agent; plus furosemide (Lasix) and aminocaproic acid (Amicar). In 2005, Kentucky completed its transformation from liberal to conservative, by adopting model rules devised by the national Racing Medication and Testing Consortium banning any drug other than Lasix plus one of four adjunct anti-bleeder drugs on race day and permitting one of three nonsteroidal anti-inflammatory drugs at least twenty-four hours before the race. As a result, some trainers boycotted the first meet of the year to be run under these rules at Turfway Park in September and told

me, "This is a crock. They haven't got a right to tell me how to treat my horses. It's not about welfare at all, it's about politics."[17]

As the English Jockey Club indicated on its website, most US states allow racehorses to compete while treated with both Lasix (a diuretic, still commonly known as Lasix but officially renamed Salix in 1999) and phenylbutazone (bute, a nonsteroidal anti-inflammatory drug). Both of these once-banned substances are ubiquitous in racing. In a survey conducted in the US in 2001, almost all horses ran on bute and 92 percent ran on Lasix. In the UK, some breeders regard Lasix as responsible for the deterioration of the breed, since it masks bleeding and therefore subverts the racecourse test. Horses that would be weeded out by the racecourse test under international racing conditions are treated with Lasix and go on to become sires, thus contaminating the entire breed with what my UK informants referred to as the dreaded "bleeding gene." Bute arouses less suspicion, partly because it is a more familiar drug in the UK and partly because there is greater consensus about its effects. However, recent studies have shown that bute impairs bone repair and healing, as might be expected of an anti-inflammatory drug. It is also associated with stomach ulcers, kidney dysfunction, and inflammation and ulceration of the colon. Ulcers are a chronic problem in the racehorse population: a 1996 study claimed that 90 percent of racehorses in the US suffer from gastric ulcers.[18]

The disagreement over Lasix is partly due to the different ideas of what it does ("therapeutic medication" vs. "performance-enhancing drug") and partly due to a related difference in the perception of what a racehorse is and what racing is for. Lasix was the first furosemide product introduced to veterinarians in 1967. It was originally designed for the treatment of mild heart conditions in cats and dogs. According to the respected racing journalist Andy Beyer, it was in use by the 1970s in Maryland, and "the form . . . went absolutely haywire. Horses were just doing 20-length improvements overnight. You would see horses that would quit run all day long." Once the drug was identified by the racing authorities, Maryland horsemen claimed that it was therapeutic, a necessity in the treatment of bleeding. The drug corrected a *distortion* of the horse's natural ability on the racetrack. The campaigns to legalize Lasix and bute in the mid-seventies also focused on the economics of horse ownership. Trainers argued that it would increase the number of starts per horse and in doing so increase returns to owners. This argument is still used in Kentucky, where trainers told me that owners are impatient and that horses need to run once a month in order to cover the costs of training, a feat that is possible only with the help of therapeutic medication. Unfortunately, it seems that the opposite has happened. The number of starts per horse per year has decreased from more than eleven in 1960 to fewer than seven in 2002. There is no universally accepted

explanation for this decrease, although year-round racing, the commercial breeding industry, and a decline in horsemanship were often mentioned by my informants. The tendency of racetrack owners to produce fast surfaces in order to attract gamblers was a perpetual gripe among trainers and owners during my fieldwork in Kentucky. They attributed high rates of injury to these hard surfaces. The conversion of Keeneland's main track, from a layer of sand on top of a concrete base, to the cushioned surface and vertical drainage system of "Polytrack," a less demanding surface, reflects the increasing concern of the state that owners will choose to race elsewhere.[19]

Lasix is still thought of as a product to control exercise-induced pulmonary hemorrhage (EIPH) (commonly known as "bleeding") in racehorses. However, there is no agreement about the causes of EIPH or its effect on performance. According to recent work by the Animal Health Trust in Newmarket, the majority of horses undertaking strenuous exercise tend to bleed in their lungs, and this is not limited to racehorses. Bleeding may be an occupational hazard. There is also disagreement about the physiological impact of Lasix—its effectiveness and the effect of it in combination with other medications. Lasix functions as a diuretic, and horses commonly lose between 2 and 4 percent of body weight after they have been injected (roughly twenty-two to forty-four pounds). Some commentators believe that weight loss is the sole explanation for the improved performance of some horses on Lasix, and they are skeptical of its effect on or its connection with bleeding. Some opponents of Lasix have also argued that this diuretic effect also enables the masking of other drugs in urine samples.[20]

Germany has the most restrictive drugs legislation of any racing nation. Colts who compete overseas on Lasix are not allowed to enter the breeding population. This creates two related breeds, the non-Lasix Thoroughbred and the Lasix Thoroughbred. The two breeds have very different origin stories, with the non-Lasix Thoroughbred having been produced from horses imported by Englishmen from the Middle East in the eighteenth century and the Lasix Thoroughbred having been produced by the economics of horse racing in North America in the twentieth and twenty-first centuries. It is also interesting to note that this restriction does not apply to mares, preserving an asymmetrical image of racehorse procreation.

In the US, Lasix is part of the race-day routine; in the UK, despite the explicit anti-drug stance of most racing professionals, it is used, discreetly, by some trainers and withdrawn as the race approaches so that it does not appear in a race-day urine sample. (Withdrawal times are given on the HRA website, the kind of information that would have been unthinkable on the Jockey Club website.) Furthermore, horses that are found to bleed in the UK may be exported to the US in order to race

with the aid of Lasix. Similarly, horses based in Europe often compete on Lasix when they travel to the US. It is not the case that performance-enhancing procedures are used in the US and not in the UK; rather, it is a matter of definitions and emphasis. In the UK, for example, horses with breathing problems are "tubed," the equine version of a ventriculectomy, or "Hobdayed" (an operation in which the left vocal cord is tied back to the larynx). In the US, snake and snail venom is used to numb the legs, and the use of shock wave therapy to numb partially healed fractures was causing concern among jockeys and exercise riders during my stay in Kentucky. All of the two-year-olds in the barn I worked for were "pin fired"—a controversial procedure in which a hot probe is repeatedly inserted into the shin, producing an inflammatory response. The resulting healing process (which takes two or three months) is thought to strengthen weak shins. Despite being illegal in the UK and something not taught at veterinary colleges in the US, pin firing is ubiquitous in Kentucky. In the UK, blistering (regular and direct application of caustic liquid) is the traditional method used to toughen the tendons so that they withstand the rigors of training. In the US, low heel nerving, the severing of the main nerve to the foot below the level of the ankle joint, is used to eliminate lameness caused by sore feet. In the UK, horses that have sore feet are trained in swimming pools and wear padded shoes in order to allow them to continue to run. Joint or synovial fluid replacement is a common experience for horses in both countries. Tubing, Hobdaying, synovial fluid replacement, padded shoes, blistering, pin firing, snake venom, shock wave therapy, and nerving are all techniques that enable trainers to overcome the infirmities of their horses. The commonplace idea that British racing takes place without veterinary intervention and is insulated from the more permissive regime of the US conceals a more complex truth.[21]

Professionals in the UK and the US have more in common than they like to admit. Both engage with the idea of the Thoroughbred as a naturally talented animal while at the same time they intervene in its physical properties. The contrasts they draw reflect important differences in self-image. British racing professionals consider their racing and their Thoroughbreds superior on the grounds that the system there closely resembles the original incarnation of racing on the Heath at Newmarket. This small community values the conservation of a way of life that is based upon the exploitation of Thoroughbreds above all else. American racing professionals emphasize the meritocratic elements of their sport, as a reflection of the qualities of their wider society. In practice, racing in the UK is not competition between horses that are wholly untouched by commercial pressures and unmodified by technology. Nor is racing in the US unfettered competition between horses and people who are free of entrenched advantages of any kind.

The preoccupations of my informants reflect the current state of racing in their respective nations. They also reflect the place of racing in the global market for gambling. If the UK commands greater social capital in this context as a result of its distinctive legislative history, the command structure of racing in the UK has nevertheless been dismantled in the past five years, in response to the investigation by the OFT. At the time I began fieldwork in Newmarket in 1996, the Jockey Club was still going strong, and the BHB was often portrayed as its lackey. As I complete this book, British racing has been turned upside down. The Jockey Club has been replaced by the Horseracing Regulatory Authority. The BHB remains in charge of race planning, marketing, and the orders of racing, although the fixture list is now at least partly determined by auction. The newly formed Horsemen's Group will negotiate with bookmakers over the price of pictures of racing to generate capital for prize money.

The fixture list has been opened up to commercial pressures, and some of the orders and rules of racing have been relaxed. Three new AWTs have been built, the number of fixtures has grown, and the fifty-mile rule has been swept away. As we have seen throughout the history of racing, changes in governance affect the type of racing produced and eventually the Thoroughbred itself. The creation of bookmaking and the extension of Jockey Club rules to racecourses beyond Newmarket prompted the complete transformation from matches to sweepstakes that took place between 1740 and the 1870s. The Thoroughbred emerged at this time. In the US, the creation of dirt racecourses by gambling syndicates and the absence of any powerful central authority created racing that was short, fast, and relatively cheap to produce. A new kind of Thoroughbred developed: the specialist sprinter. Unlike many of my informants, Ruth Quinn, the racing director of the BHB, is confident that British racing will remain distinctive: "I personally believe that British racing will always remain fundamentally a turf sport. Our heritage is extremely valuable, and our top races will continue to be run on turf."[22]

At the same time that racing in the UK has been forced to expose itself to commercial pressures, Kentucky has undergone a very different transformation. From being the state with the most permissive medication regulations in 1999, when milkshakes and fifteen different kinds of medication could be administered to horses up to four hours before a race, Kentucky is now one of the most restrictive. It has changed in order to preserve its market share of gambling and its reputation for producing high-quality racing and Thoroughbreds. In other words, it has increased legislation in order to enhance the perceived integrity of its product. Trainers have been resistant to this change; breeders, on the other hand, strongly support the new rules. In 2005, approximately 130 of them signed a letter to the Kentucky Racing

Authority, stressing the importance of uniform medication rules between states in order to preserve the confidence of gamblers and owners and the health of the breed: "Our best horses are running fewer and fewer races before they retire. Distance racing and handicap racing are now but memories. If drugs are allowed to influence a horse's racing performance, no one can know if a win is the result of true ability and good genes or effective doping." It is ironic that Kentucky is shackling market forces at the precise moment that British racing welcomes them into the fold. Despite reducing legal medication and being only the third track in the US to convert from dirt to Polytrack, Kentucky is not returning to the kind of racing that is produced in the UK any more than racing in Britain is about to move to a North American model. Both are responding to national and international forces that will write a new chapter in the making of racing.[23]

EPILOGUE

In explicit contrast to the North American emphasis on speed and uniformity, racing professionals in the United Kingdom regard their racing as the most authentic in the world, the closest to the sport that took place between royalty and the aristocracy on Newmarket Heath in the seventeenth century. Nevertheless, the kind of racing that takes place at Newmarket today is significantly different from the long-distance heat races that took place there in the seventeenth century. It is much more similar to the multiple-runner races over shorter distances that began to dominate in the nineteenth century. This did not prevent my informants from invoking James I and Charles II as role models, as did one Newmarket trainer who told me, "If it was good enough for the Merry Monarch, then it's good enough for me. This place is intended for one thing and one thing only and has been for hundreds of years. Racing Thoroughbred horses. It's in our blood, in the blood of the horses, and in the air itself. It's impossible to imagine any other business here than the business of making racing."

The similarities between racing and breeding in the US and in the UK are as striking as the differences. Both use Thoroughbred racehorses, bred in accordance with ideas that are common to both nations, and in both places racing involves a group of professionals who share similar values. Both continue to engage with the idea of the Thoroughbred as an animal that naturally embodies certain traits that set it apart from all others. These traits are distributed throughout the breed via the mechanism of heredity. The content of this idiom varies through time and space but preserves certain perpetual concerns: the relative contributions of male and female, prepotency, and the origins of brilliance.

The Thoroughbred was particularly well suited to expressing the new relationship between nature and society that was emerging in England in the eighteenth century. The General Stud Book (GSB) is regarded as the first studbook of any breed of any species, and it enshrined the modernist idea of progress, as well as protecting the market for purebred horses and offering opportunities for wealth creation through their exchange. It celebrated the idea of purity of lineage and provided a basis for the discussion of miscegenation, pollution, and corruption in terms that reflected the existing arrangements between classes and genders.

Studbooks, breeding treatises, apprenticeships, family businesses, websites, public companies, international committees: the Thoroughbred has created extensive institutionalized interests as an object of knowledge. The GSB delineated the breed, and the breeding manuals that followed offered competing visions of its future and of distinctions within the breed. Horsemen and horsewomen put these theories into action, on the stud farm, at the auction, and on the racetrack, occasionally feeding back into the process, converting their embodied knowledge into books and pamphlets. This literature developed some distance away from mainstream veterinary knowledge and in close proximity to early eugenic tracts. The swift dismissal of eugenics by the scientific community in the aftermath of World War II was not reproduced in the world of Thoroughbred breeding.

The status of the Thoroughbred and the potential social and financial rewards of unlocking the secret of its production have encouraged many attempts to "crack the code" of pedigree. The laborious calculations of Bruce Lowe, Colonel Vuillier, and Steve Roman all reveal a determination to reduce the apparently unfathomable and unrepeatable successes of particular combinations of animals to a simple formula. The energy and optimism of these approaches commands respect; their tortured equations and the vast reams of names and relationships they generate are a kind of poetry, a grammatical representation of the workings (and undoing) of particular breeding theories. These calculations continue to inform the decisions of breeders, despite their inconsistency and a disregard for current knowledge about fertility and heredity, including at the level of genetics. Participants in the social practice of breeding racehorses are capable of absorbing new insights from biomedicine and veterinary research and recasting their findings in terms with which they are comfortable.

In addition to the academic study of pedigree, Thoroughbreds can also be known through their bodies. Living racehorses embody infinite combinations of physical and mental attributes. This is how many racing professionals prefer to know them. The physical assessment of a horse involves more than just the arrangement of its body parts relative to its breeding. It also involves an act of communion. The vision attributed to those who have "an eye for a horse" is a mystical quality. It cannot be

taught, but is either inherited or embodied, taken in through the blood. It depends upon the sensitivity of the human to the essence of the horse. This connection takes place in nature, and it implicates the whole person and his or her status within this small world of experts.

Newmarket and Lexington each maintain a strong association with Thoroughbred breeding and racing. The preservation of a particular way of life in Newmarket is partly the result of the presence of the Jockey Club and associated institutions that have guided it since the mid-eighteenth century. It is also due to the purchase of land by the Jockey Club in the nineteenth century, as well as the maintenance of strict land use policies by the local council. In Kentucky, a special relationship with the Thoroughbred is claimed on the basis of the particular qualities of the Blue Grass region. The original pattern of land distribution was made possible by the extreme fertility of the land and the rapid emergence of a merchant class on the basis of Lexington's pivotal role as the "Athens of the West." More recently, breeders have preserved the association of limestone-rich paddocks with the ability to "grow a good foal" by resisting the development of land in the area for purposes other than the production of Thoroughbreds. In 2005, the inner Blue Grass was added to the World Monuments Fund's list of one hundred most endangered sites.[1]

On the studs of Newmarket and Lexington, Thoroughbreds are bred using technologies that have transformed the nature of racehorse fertility in just a few generations. These changes are inscribed upon the bodies of round-rumped fillies and surgically modified yearlings. Despite the changes in practice, the idea that Thoroughbreds naturally reproduce the traits we most value on the racecourse are remarkably well preserved. Huge books of mares put to stallions cause anxiety, but limits have yet to be enforced. First-season sires, some of whom may have run only five or six times, continue to be popular choices for mare owners, eager to have something to play with at auction, where professionals from both the US and the UK positively revel in moral ambiguity, and feel more threatened by auditing mechanisms including codes of practice (voluntary or not) than they are by the unspoken, unwritten rules of the game.

Thoroughbred breeding is also under pressure from the increasing commercial viability of cloning and embryo transfer. The ban on artificial insemination (AI) holds back this particular tide, but it may not do so forever. Each of the techniques seems to offer the promise of improvement for the Thoroughbred. Cloning allows sterile horses to reproduce and ultimately allows talented horses to be replicated and untalented horses discarded. Embryo transfer allows mares to continue to compete while surrogates produce their offspring. It also allows for the use of dams with roomier wombs, which have been shown to produce healthier offspring. On the

other hand, they also threaten both the economic structure of racehorse breeding and the idea of variety that most breeders uphold. My informants reject cloning on the basis that it would destroy the value of their assets. They argue that even the most talented animals would be made worthless since, once cloned, they would no longer be unique sources of their own genetic makeup.

Earlier developments in reproductive technology, including the practice of breeding in hand, the use of lights and hormones, and the Caslick procedure do not threaten the idea of the Thoroughbred as a selectively bred creature. They accelerate or enhance what are perceived to be natural processes, and they have been absorbed by the industry despite their novelty. In complete contrast, a cloned Thoroughbred would no longer be a Thoroughbred in any sense that is significant to my informants and makes any promise of improvement within the breed irrelevant. It is perhaps possible to conceive of the development of a separate breed of cloned racehorse, in the same way as the German Stud Book has delineated a separate breed by banning the entry of stallions that have raced on Lasix. Clones and Thoroughbreds are two very different animals, activating distinct but shared connections with human society.[2]

On the training yards of the UK and the tracks of the US, the day-to-day production of racing is in the hands of people who are less well known than the horses they tend. Trainers in both countries explain the low rewards associated with the role of lad or racetracker by appealing to the unchanging nature of the Thoroughbred (despite the many changes that have taken place in the care of Thoroughbreds and the horses themselves). In both nations, people who do the dirty work associated with caring for racehorses are undervalued, both financially and socially. The changes in the working conditions of lads and racetrackers have not kept pace with other agricultural industries. In Kentucky, African Americans have been replaced by a workforce of legal and illegal immigrants from Latin America. Although they have successfully usurped the previous group, this workforce has not unionized or improved working conditions. Their marginality (based partly upon their illegal or semilegal status) compels them to carry the costs of the risks involved in riding and caring for racehorses, by operating as independent contractors. In the UK, the turnover in the stable and stud workforce is sufficiently high that trainers talk of a labor crisis. Reviews including the 2004 Donoughue Report, which speaks of the need for reform and for greater respect accorded to stud and stable workers, suggest that the current situation has been deemed unsustainable.

Professionals on both sides of the Atlantic exaggerate the differences between racing in the US and the UK, thereby expressing ideas about themselves and about each other. In the UK they condemn the use of performance-enhancing drugs and

the attendant infirmities of the Thoroughbred in the US, the result of impatience and greed. In the US they condemn the class-based restrictions of UK racing society as they see it. In practice, things are not so straightforward. British trainers use some of the same and many similar techniques in order to allow their horses to express their inherited talent. Certain techniques are accepted and others rejected, according to a flexible set of conventions. When competing overseas, for example, most trainers take advantage of whatever medication is permitted. In the US, informants were critical of the "stuffed shirts" of England, patiently explaining to me that anyone can be anything in their country. At the same time, the majority of people in positions of authority within the US industry are drawn from the narrow demographic of white, middle-aged men, while the majority living and working on the backstretch are not. The UK Thoroughbred is not a pristine animal, untouched by human intervention, nor is racing in the US a strict meritocracy. These ideals form a conceptual boundary between the two communities based on what is most important to each.

The racing authorities of both nations have struggled to make racing unique while at the same time appealing to as broad a group of consumers as possible. In the UK, the Jockey Club and, since 1993, the British Horseracing Board attempted to preserve the traditions that made racing popular in the past. This brought allegations of exclusivity and made racing seem antiquated in comparison to other leisure industries. It eventually attracted the attention of the Office of Fair Trading. As a result, the structure and administration of racing in Britain has been transformed. The most striking change has been the creation of the Horseracing Regulatory Authority, along with the withdrawal of the Jockey Club from the governance of racing. In the US, racing was never shackled by a strong centralized administration, but it has had to compete with other kinds of gambling without a shared set of rules or purpose. In order to encourage people to buy and maintain racehorses, racing must be seen to offer rewards for participation that are not available elsewhere. To compete with alternative forms of gambling, it must be accessible and transparent. Racing worldwide is thus caught between the competing pressures of mass appeal and distinctiveness.

Racing was often described to me as an exhibition of the competitiveness that is part of nature, human and otherwise: the "survival of the fittest" in action. Furthermore, within the race, horses were described as enacting other human attributes. The winning racehorse has "heart." If he has overcome a poor draw, or a bad start, or a bump during the race, the horse may be credited with heart in spades. Horses that run fast for the first part of the race and fade are "losers"; they flatter to deceive, can't go through the pain barrier when it really counts. Those that fail to take an active

role in the race at all are "dogs"; these have terminally flawed characters. Each race is a demonstration of the physical and moral qualities of the competitors, and to many of my informants, "racing is life."

This book has described some of the complex activities that currently surround the production of Thoroughbred racehorses and Thoroughbred racing. Every Thoroughbred in the world today is the result of a mating that has been arranged by a human, whether this is backed up by the mass of breeding literature, a desire to meet the demands of the market, or simply the result of a hunch. From the time that it is devised on paper until the end of its life (and beyond, in the case of those that are buried, stuffed, written about, or otherwise preserved or memorialized) the Thoroughbred is subject to human intervention. At the same time, whether it is reproducing or running, it is construed by humans as representative of nature, as "doing what comes naturally," as so many of my informants chose to describe it.

The type of racehorse that dominates any era is a reflection of the priorities of the time. In the US, commercial incentives to produce animals to run on dirt tracks owned by gambling syndicates dominated over concerns with social capital that were preserved in the UK. Two types of horse emerged: the sprinter that was created and supported by an intensive veterinary regime in the US and the more traditional European Thoroughbred, capable of running further, without medication, but lacking the blistering speed of his American cousin. The different circumstances under which these countries first encountered the Thoroughbred and the different priorities that have guided the development of racing led to the creation of rather different animals. Today, global demand for Thoroughbreds and changes in the kind of racing that is popular with gamblers, combined with the increased availability of air travel, have reduced the differences between them. Despite the similarities between Thoroughbreds bred and trained in the US and those raised in the UK, racing professionals from each nation continue to stress different properties in their own animals and those of their competitors. They establish boundaries between their communities by using the Thoroughbred to express their ideas about themselves and about others.

Racing professionals create both the sport of racing and the Thoroughbred while they deny that any such manufacture has taken place. The important and compelling aspects of the racehorse are attributed to nature, as opposed to artifice. This is a moral distinction, based upon the systematic denial of human intervention in the lives of Thoroughbreds despite all of the evidence to the contrary. The racehorse is not marketed as a machine. Unlike the promotion of a car, for example, attention is not drawn to a pin-fired leg as a performance-enhancing optional extra like air-conditioning or cranked-up suspension. The pin-fired leg is a mechanical response

to a weakness where natural strength would be preferable.[3] The paradox of the Thoroughbred as a selectively bred creature, naturally embodying specific physical traits, contributes to its construction in opposition to a modified object in possession of mechanical or induced traits. It is this notion of the racehorse that connects it to the prestigious history that can be evoked by the description of racing as "the sport of kings." Ironically, the extensive modification of the racehorse that I have observed is undoubtedly connected to its status as selectively bred. If intervention begins at conception, where should it end? All of the Thoroughbreds I have described are hybrids, embodying combinations of qualities that are both natural and artificial. This hybridity is denied by racing professionals because it threatens the ability of Thoroughbred breeding and racing to represent human society. In order to stand for society, Thoroughbreds must stand outside it, as part of nature.

To continue to capture the imagination the racehorse must retain its status as an animal with unique natural properties, albeit uneasily. If Thoroughbreds lose their perceived independence from human society, we can no longer use them to understand how we should act or to justify how we behave. However, the racehorse also begs us to interfere, to inscribe upon it our own vision. It is these properties, held in tension, that make it such an enduring object of fascination. The future of the Thoroughbred will depend upon which aspect is allowed to dominate. Is it a noble creature with a celebrated history, an embodiment of natural talent, honed by judicious intervention by men of honor? Or is it a commodity, and as such, subject to the same limitless exploitation as all other objects? Is a creature that has been described as a joint endeavor between God and man worthy of preservation? Or is everything simply up for grabs? Surely the Thoroughbred will continue to embody both sets of possibilities, because, as this book has shown, racing professionals strive not for consistency but for flexibility and a degree of fit between their own concerns and their understanding of the horses they produce and manage.

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Notes

PREFACE

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CHAPTER 1. HISTORIES

1. Horses are still measured in hands; one hand is four inches. Height is measured at a line perpendicular to the ground along the front leg, to the "withers," a point at the base of the neck, where it joins the back. The headline in the *Thoroughbred Record* read "Iroquois wins the Derby"; the newspaper extract is reproduced in William Robertson and Dan Farley, *Hoofprints of the Century: From the Thoroughbred Record, 1875–1974* (New York: Record Publishing Co., 1976), 37.

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4. William Fitz-Stephen, *Norman London*, trans. H. E. Butler (New York: Italica Press, 1990); Wilkinson, *Early Horse Racing in Yorkshire*, 50; Alexander Mackay Smith, *The Colonial Quarter Race-horse: America's First Breed of Racehorses, Prime Source of Short Speed* (Middlesburg, Va.: H. K. Groves, 1983), 31; Wilkinson, *Early Horse Racing in Yorkshire*, 58.

5. Guineas are units equaling a pound and a shilling (five pence). John Pond (EPHEMERIDES), *The Sporting Kalendar* (London, 1751), 122.

6. Wilkinson, *Early Horse Racing in Yorkshire*, 35. The race is described by William Pick, author of *An Authentic Historical Racing Calendar of All the Plates, Sweepstakes, Matches and c. Run for at York from 1709 to 1785 Inclusive* (York: W. Blanchard and Co., 1786), and quoted in Wilkinson, *Early Horse Racing in Yorkshire*, 35, 69, 27.

7. Isham's journal, pages 62–63, is quoted in Hore, *The History of Newmarket*, 3:122–23.

8. Pond, *The Sporting Kalendar*, xxii.

9. Ibid., xxii, xxiii.

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12. Pond, *The Sporting Kalendar*, xx–xxiii; Pick, *Authentic Historical Racing Calendar*; William Tuting and Thomas Fawconer, *The Sporting Calendar* (London: Printed for J. Miller, 1770); John Cheny, *An Historical List of All Horse-matches Run for in England and Wales* (London, 1728); Reginald Heber, *An Historical List of Horse Matches Run and of Plates and Prizes Run for in Great Britain and Ireland, 1751 to 1768* (London, 1752–69); John Muir, *Ye Olde New-Markitt Calendar of Matches, Results and Programmes from 1619 to 1719* (London: J. B. Muir, 1892), and *W. T. Frampton and the "Dragon"* (London: J. B. Muir, 1895); John Orton, *Turf Annals of York and Doncaster* (York, 1844); James Weatherby, *An Introduction to a general Stud-Book; containing (with few exceptions) the pedigrees of every horse, mare and c. that has appeared on the turf for the last fifty years, with many of an earlier date, etc.* (London: J. Weatherby, 1791).

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CHAPTER 3. THE HORSEMAN MAKES THE HORSE

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3. Pin firing is a procedure in which a hot probe is repeatedly inserted into the shin, producing an inflammatory response. The resultant healing process (which takes two or three months) is thought to strengthen weak shins. As mentioned in the previous chapter, the practice is illegal in the UK and not taught at veterinary colleges in the US.

Essay on Sources

The most important written resource for this text has been the racing press in Britain and North America, primarily the *Racing Post*, produced and published in London, and the *Blood-Horse* and the *Thoroughbred Times*, both produced in Lexington. Apart from a seven-month period in 2006 when the *Sportsman* attempted, unsuccessfully, to double the number of racing dailies available in the UK, the *Racing Post* has been the only racing daily since it merged with the *Sporting Life*, a much older paper, in 1998. First published in 1986, the *Racing Post* is the authoritative final word on racing in the UK. It provides data on the runners and riders in all English races as well as those in many other jurisdictions. It also contains greyhound entries, bloodstock news, trainer profiles, and other kinds of editorials and racing tips. All of this information is reproduced on a website at www.racingpost.co.uk, which includes an invaluable cuttings library where all of the articles referred to in the text may be accessed. Based on my experience working on the *Post* as a British Horseracing Board graduate trainee, I would argue that the daily racing pages are somewhat conservative, since they depend upon the goodwill of trainers prepared to answer the phone the morning before a race. The industry commentators, however, and particularly Jim Cremin, Howard Wright, Rachel Pagones, and David Ashforth, are peerless in their fields. Their opinions have been quoted extensively throughout this book and also inform my understanding of the racing industry.

Weekly magazines the *Thoroughbred Times* and the *Blood-Horse*, both published in Lexington, are similarly definitive sources of racing industry information in the US, where the form is produced separately, in the *Daily Racing Form*. Founded in 1916, the *Blood-Horse* is produced in association with the Thoroughbred Owners and Breeders Association (TOBA) and provides information on racing, breeding, sales, farm management, veterinary issues, and other industry matters. Its website, which includes a searchable archive, can be found at www.bloodhorse.com. The *Thoroughbred Times*, an oversized weekly, contains regular features including sire lists, stakes winners, and Thoroughbred quotes as well as occasional articles on issues of the day; it can also be found on the web at www.Thoroughbredtimes.com.

As well as these three core sources, there are a large number of periodicals that cover Thoroughbred racing in particular jurisdictions, including for example, *Galop Magazine* (France) and the *California Thoroughbred*. These and others like them are useful for discussions on rivalries between nations and regions and the relative merits of particular horses. They also reveal a particular racing jurisdiction's image of itself.

Unlike in the US, many important articles about racing are published in the mainstream British press. Every newspaper in the UK provides daily racing news, and racing news items

often spread from the back pages to the front. On two occasions during my fieldwork the death of a racehorse made every front page in Britain: Best Mate in 2005 and Desert Orchid in 2006. The most important tabloid sources are the *News of the World* and the *Sun*, the former being particularly useful for tales of corruption and stings involving leading jockeys. The broadsheets also commit extensive space to racing. The most respected racing journalists include Lydia Hislop of the *Evening Standard*, Richard Evans of the *Daily Telegraph*, Alan Lee of the *Times*, Sue Montgomery of the *Independent*, and Eddie "the Shoe" Fremantle, of the *Observer*. The *Newmarket Journal*, a local newspaper, provides an alternative perspective. In particular it has provided useful coverage of discussions about land use around the town and the drug problem within.

In the US, the *Washington Post*, the *Los Angeles Times*, and the *New York Times* run occasional articles on labor relations on the backside. The *Lexington Herald Leader* and the *Louisville Courier Journal* are both excellent sources for links between politics and the funding of racing. During Kentucky Derby week the *Courier Journal* is particularly lively.

I consulted numerous websites during the course of my research, the most important of which were the British Horseracing Board at www.bhb.co.uk and the American Jockey Club at www.jockeyclub.com. Both sites contain industry data and archived reports. In particular, the Jockey Club Online Factbook at www.jockeyclub.com/factbook.asp provides up-to-date data on racing in North America and worldwide. Three reports archived on the British Horseracing Board's website are indispensable in understanding the quiet revolution that has taken place in British racing in the past five years: The Racing Review, Part 1: The Racing Product (April 2003); The Racing Review, Part 2: The Racing Experience (June 2003), and The Racing Review, Part 3: The Financial, Administrative, and Governance Structure of Racing (June 2004).

Vast numbers of books are written about racing each year, many of them written by racing insiders or written about famous horses or racing professionals. By emphasizing the achievements of successful individuals (horse or human), these books overlook the everyday experiences of the majority of people and horses involved in racing who will never enjoy great success or its trappings. I have treated such books with suspicion. The same health warning applies to the written history of racing, though historians such as Mike Huggins in the UK and Edward Hotaling in the US have begun to address this problem. Carole Case is one of the few sociologists to have used participant observation to study horse racing society, and she has written two full-length studies: *The Right Blood: America's Aristocrats in Thoroughbred Racing* (New Brunswick, N.J.: Rutgers University Press, 2001) and *Down the Backstretch: Racing and the American Dream* (Philadelphia: Temple University Press, 1991).

A racing journalist, Jocelyn de Moubray (*Horse-Racing and Racing Society: Who Belongs and How It Works* [London: Sidgwick and Jackson, 1985] and *The Thoroughbred Business: Inside the Modern Bloodstock Industry* [London: Hamish Hamilton, 1987]), and a breeding expert, Franco Varola (*The Functional Development of the Racehorse* [London: J. A. Allen, 1980] and *Typology of the Racehorse* [London: J. A. Allen, 1974]), wrote the books that I consider to be the closest ancestors of this text. Both authors attempted to relate the kinds of Thoroughbred racehorses produced to important features of the societies producing them. These books are now dated, but their original insights remain valid.

PREFACE

The approach I have employed in the text is inspired by writers such as Donna Haraway and Harriet Ritvo, who are interested in the significance of our activities with animals and how they reveal something about our perceptions of what it means to be human, as well as a member of certain groups, be they defined by gender, race, class, age, or whatever. This argument is most fully and most skillfully developed by Donna Haraway in *Primate Visions: Gender, Race, and Nature in the World of Modern Science* (New York: Routledge, 1989) and by Harriet Ritvo in *The Animal Estate: The English and Other Creatures in the Victorian Age* (Cambridge, Mass: Harvard University Press, 1987). An overview of the development of this perspective within anthropology can be found in Molly Mullin's excellent article "Mirrors and Windows: Sociocultural Studies of Human Animal Relationships" in the *Annual Review of Anthropology* 28 (October 1999): 201–24. My approach is distinctive in that I am interested not only in the symbolic value of animals but also their production and consumption, in other words, in the political economy of Thoroughbred racehorses and Thoroughbred racing, including the kinds of inequalities and contradictions it creates and sustains.

CHAPTER 1. HISTORIES

Histories of racing such as Robert Lyle's *Royal Newmarket* (London: Putnam, 1945) and John Hervey's series *Racing in America, 1665–1865* (New York: Jockey Club, 1944) and *Racing in America, 1922–1936* (New York: Jockey Club, 1937) tend to focus on the exploits of elite individuals and groups. Of greater interest are recent approaches to racing history that describe the involvement of middle- and lower-class individuals, women, and people of color, as well as non-Thoroughbred horses. Of particular note are David Wilkinson, *Early Horse Racing in Yorkshire and the Origin of the Thoroughbred* (Old Byland: Old Bald Peg Publications, 2003), Mike Huggins, *Flat Racing and British Society, 1790–1914: A Social and Economic History* (London: Portland, or Frank Cass, 2000) and *Horse Racing and the British, 1919–1939* (Manchester: Manchester University Press, 2003). Peter Edwards has been working diligently on the history of horses in England for many years and has written the useful *The Horse Trade of Tudor and Stuart England* (Cambridge: Cambridge University Press, 1988), inspired by his teacher, Joan Thirsk, whose *Horses in Early Modern England: For Service, for Pleasure, for Power* (Reading: Reading University Press, 1978) set the standard for investigations of this kind.

In the United States, Edward Hotaling has opened an important debate concerning the contribution made by African Americans to the sport of racing, in *The Great Black Jockeys: The Lives and Times of the Men Who Dominated America's First National Sport* (New York: Three Rivers Press, 1999). He has also produced the more specialized *They're Off! Horse Racing at Saratoga* (Syracuse: Syracuse University Press, 1995) and *Wink: The Incredible Life and Epic Journey of Jimmy Winkfield* (London: McGraw-Hill, 2005). John Dizikes brings to life a particular racing era in *Yankee Doodle Dandy: The Life and Times of Tod Sloan* (New Haven, Conn.: Yale University Press, 2000). One of the few writers to attempt to bring together British and North American racing history is Roger Munting, who focuses on gambling but includes

sections on horseracing in *An Economic and Social History of Gambling in Britain and the USA* (Manchester: Manchester University Press, 1996). In general, the stories of racing in the UK and the US are told separately and punctuated by different events, heroes, and heroines.

Older histories and sporting or racing calendars provide snapshots of racing in Britain and North America at particular times. The most important are John Pond (EPHEMERIDES), *The Sporting Kalendar* (London, 1751), John Pick, *An Authentic Historical Racing Calendar of All the Plates, Sweepstakes , Matches and c. Run for at York from 1709 to 1785 Inclusive* (York: W. Blanchard and Co., 1786), William Tuting and Thomas Fawconer, *The Sporting Calendar* (London: printed for J. Miller, 1770); John Cheny, *An Historical List of All Horse-matches Run for in England and Wales* (London, 1728); Reginald Heber, *An Historical List of Horse Matches Run and of Plates and Prizes Run for in Great Britain and Ireland, 1751 to 1768* (London, 1752–69); John Muir, *Ye Olde New-Markitt Calendar of Matches, Results and Programmes from 1619 to 1719* (London: J. B. Muir, 1892), and John Orton, *Turf Annals of York and Doncaster* (York, 1844). John Hore's *The History of Newmarket and the Annals of the Turf: With Memoirs . . . of Notable Turfites . . . to the End of the Seventeenth Century* (London: A. H. Baily and Co., 1886) is a valuable source of early statistical and regulatory data, including the change in racing from matches to sweepstakes and government statutes relating to racing, as well as revealing the particular preoccupations of the day.

In the US, Richard Mason, *The Gentleman's New Pocket Companion* (Petersburg, Va.: John Dickson, 1811), Fairfax Harrison, *The Equine F.F.V.s: A Study of the Evidence for the English Horse Imported into Virginia before the Revolution* (Richmond, Va.: Old Dominion Press, 1928), John Wall, *Thoroughbred Bloodlines: An Elementary Study* (Baltimore, Md.: Monumental Printing Co., 1939) and *The Horse of America in His Derivation, History and Development* (New York: the author, 1897), Charles Trevathan, *The American Thoroughbred* (New York: Macmillan, 1905), and Barnum Culver, *Blooded Horses of the Colonial Days* (self published, 1922) provide indications of both the kind of data racing historians were expected to provide and the audience for which they were primarily intended: other horsemen. Not all of the information in the racing calendars and early histories coincides, and several versions should be consulted if verification of particular facts regarding breeding, ownership, and results is sought.

The greatest resource for investigating the earliest Thoroughbred pedigrees, although containing several well-known and presumably some yet to be discovered inaccuracies, is the *General Stud Book*, first presented by James Weatherby as *The General Stud-Book; containing, with few exceptions, the pedigree of every horse, mare and c. of note that has appeared on the turf, for the last fifty years, with many of an earlier date, together with some account of the foreign horses and mares from whence is derived the present breed of racers, in Great Britain and Ireland* (London: J. Weatherby, 1793) and *The General Stud-Book, containing pedigrees of race horses, &c., &c., from the earliest accounts to the year 1807, (etc.) inclusive* (London: James Weatherby, 1808). The 1808 edition is numbered as the "first edition" and subsequent editions are numbered from it. The most recent version can be found on the web at www.weatherbys.co.uk. The practice of naming horses after their owners, the running of and breeding from "ringers" (horses under false names), and the potential for genuine incompetence in transcribing names and results makes it certain that there will never be a definitive version of the Thoroughbred

breeding and racing record. My own interest lies in what drives people to research obscure races or individual horses.

Tortured discussions of the origin of the Thoroughbred can be found in William Youatt, *The Horse* (London: Longman, 1888); Lady Wentworth, *Thoroughbred Racing Stock and Its Ancestors: The Authentic Origin of Pure Blood* (London: G. A. Allen Unwin, 1938), and William Day, *The Horse: How to Breed and Rear Him* (London: R. Bentley, 1888). For more recent renderings of this debate, using DNA analysis of the foundation mares, I have referred to Emmeline Hill, "Using DNA Analysis to Correct Errors of the Past," *Racing Post*, 4 September 2002, 10; Emmeline Hill and Paul Cunningham, "How False Trails of Thoroughbred History Have Led Us Astray," *Racing Post*, 3 September 2002, 10, and Emmeline Hill, Dan Bradley, Mohammed El-Barody, Okan Ertugrul, Rebecca Splan, Ilia Zakharov, and Patrick Cunningham, "History and Integrity of Thoroughbred Dam Lines Revealed in Equine mtDNA Variation," *Animal Genetics* 33 (2000): 287–94. These three articles reveal the cultural capital that remains at stake when discussing the origin and genesis of the Thoroughbred.

The Arabian horse has prompted almost as much literary activity as the Thoroughbred. This literature is underexplored. The most useful is Roger Upton's *Newmarket and Arabia: An Examination of the Descent of Racers and Coursers* (London, 1873). When I first discovered this book I had no idea that the link that I was observing everyday on the Heath, between the Middle East and Newmarket, had such historical depth and complexity. Upton also wrote *Gleanings from the Desert of Arabia* (London: C. K. Paul, 1881), which tells the story of his trips to buy horses with the Wentworths. I have discussed the acquisition of Arabian horses by English diplomats in the eighteenth century and recent purchases of the Thoroughbred by investors from the Middle East, including the royal family of Dubai, in "Turf Wars: Arab Dimensions to British Racehorse Breeding," *Anthropology Today* 19, no. 3 (2003): 13–18.

Many books were written by Arabian horse enthusiasts in the nineteenth century. The best for engaging directly with the question of Thoroughbred breeding include Vere D. Hunt, *The Horse and His Master* (London: Longman, 1859), William Tweedie, *The Arabian Horse* (Edinburgh: Blackwood and Sons, 1894), and James Boucaut, *The Arab: The Horse of the Future* (London: Gay and Bird, 1912) and *The Arab Horse, the Thoroughbred and the Turf* (London: A. F. Bird, 1912). None of these writers was as prolific or influential as Lady Wentworth. For a characteristically strident contribution, see her *Thoroughbred Racing Stock and Its Ancestors: The Authentic Origin of Pure Blood* (London: G. A. Allen Unwin, 1938). This book is peppered with sketches and watercolors of Lady Wentworth and her husband in traditional Arabian dress. I have described Lady Wentworth's contribution to Arabian and Thoroughbred breeding in more detail in "Aborescent Culture," in *Genealogy Beyond Kinship: Transmission, Essence and Temporality in Social Theory*, ed. James Leach and Sandra Bamford (Oxford: Berghahn Press, forthcoming).

CHAPTER 2. THE RIGHT TO BE WELL BORN

This chapter was formed when I came across William Stokes, *The Right to Be Well Born; or, Horse Breeding in Relation to Eugenics* (New York: C. J. O'Brien, 1917), in the library at Keeneland racetrack. It was alongside many other horse breeding manuals ranging from the

bizarre—Nan Burket, *Moon Calendar: How to Plant Young 'uns by the Moon* (Moline, Ill.: Astrotime Press, 1980)—to the utterly conventional—Henry Wynmalen, *Horse Breeding and Stud Management* (London: Country Life, 1950). It was the inclusion in a racing library of Stokes's important text in the history of race and the eugenics movement in the United States that forced me to think carefully about the contemporary data I had been collecting from my long-suffering informants. My intention was to take further the work of John Borneman in his seminal article "Race, Ethnicity, Species, Breed: Totemism and Horse Breed Classification in America," which is reproduced in his *Subversions of International Order: Studies in the Political Anthropology of Culture*, SUNY Series in National Identities (Albany: State University of New York Press, 1998). The essential historical context for this chapter was provided by Nicholas Russell's excellent *Like Engend'ring Like: Heredity and Animal Breeding in Early Modern England* (Cambridge: Cambridge University Press, 1986).

For some of the earliest information about how horse breeding was conducted and the ideas of heredity that it assumed, I consulted *The Complete Works of Aristotle: The Revised Oxford Translation*, vol. 1, ed. Jonathan Barnes (Princeton, N.J.: Princeton University Press, 1984), and Marcus Varro, *On Agriculture*, trans. W. Hooper (London: Heinemann, 1933). Federico Tesio's, *Breeding the Racehorse*, ed. and trans. Edward Spinola (London: J. A. Allen, 1958), is the primary source of Aristotelian influence among Thoroughbred breeders today.

I also compared the works of famous horse breeders of the seventeenth century, including Gervase Markham, *Cavalarice; or, The English Horseman* (London, 1607), Nicholas Morgan, *The Horse-man's Honor; or, The Beautie of Horsemanship* (London: Printed for John Marriot, 1620), and William Cavendish, *A New Method and Extraordinary Invention to Dress Horses* (London: Milbourn 1667).

Charles Prior, author of *The Royal Studs of the Sixteenth and Seventeenth Centuries* (London: Horse and Hound, 1935), *The History of the Racing Calendar and Stud Book* (London: Sporting Life, 1926), and *Early Records of the Thoroughbred Horse* (London: Sportsman Office, 1924), is the most helpful overall source on the early Thoroughbred record, and he showed a healthy skepticism toward his data that was sometimes lacking among his peers, including, for example, Thomas Morland, *The Genealogy of the English Racehorse: With the natural history of his progenitors, from the earliest times down to the period when foreign blood was first introduced into this kingdom* . . . (London: J. Barfield, 1810).

Harry Laughlin's interest in Thoroughbred heredity is mentioned in Carole Case's *The Right Blood*. Laughlin's article "Racing Capacity in the Thoroughbred Horse" can be found in *Scientific Monthly* 38 (1934): 210–22, 310–21, and it is also referred to in Philip K. Wilson, "Harry Laughlin's Eugenic Crusade to Control the 'Socially Inadequate' in Progressive Era America," *Patterns of Prejudice* 36, no. 1 (2002): 49–67. Elazar Barkan's *The Retreat of Scientific Racism: Changing Concepts of Race in Britain and the United States between the World Wars* (Cambridge: Cambridge University Press, 1992) provided the background history of concepts of race and the eugenics movement in Britain and the United States.

CHAPTER 3. THE HORSEMAN MAKES THE HORSE

Among the hundreds of British and North American breeding manuals I have read, the three most significant, in terms of the lasting legacy they have bestowed, are Jean-Joseph

Vuilliers, *Les Croissements Rationnels dans la race pur* (Paris, 1902), William Allison, ed., *Breeding Racehorses by the Figure System*, comp. Bruce Lowe (London: The Field & Queen, 1901), and Federico Tesio, *Breeding the Racehorse*, ed. and trans. Edward Spinola (London: J. A. Allen, 1958). All contemporary breeders and breeding theorists are conversant with these three works, as is clear from the recent collection *Racehorse Breeding Theories*, ed. Frank Mitchell (Neenah, Wis.: Russell Meerdink, 2004).

Vuillier's dosage theory was expanded by Franco Varola in *The Functional Development of the Racehorse* (London: J. A. Allen, 1980) and *Typology of the Racehorse* (London: J. A. Allen, 1974). For a contemporary version of dosage in the United States, see Steve Roman's website, www.chef-de-race.com/dosage/review.htm. To see the theory applied to European horses, look at Steve Miller, "The Dosage System: A European Perspective," *Galop Magazine*, October 2001, 68–70.

The figure system was devised by Bruce Lowe and set out in full by William Allison. Other useful expositions of the theory as well as its application to Irish, French, and North American mares can be found in George Dawkins, *Present Day Sires and the Figure System* (London: Horace Cox, 1897); William Wavertree, ed., *Stallion Register: Containing tabulated pedigrees and family numbers, performances, fees and other information of 323 horses at the stud in England and Ireland* (Liverpool: Wavertree, 1900); Charles Meek, *Winners of the Past and Their Breeding: Together with Statistics Relevant to the Figure System of Bruce Lowe* (London: International Horse Agency Exchange, 1907); Edward Coussell *The Bruce Lowe Numbers of the Mares in Volume XXI of the General Stud Book* (London: International Horse Agency Exchange, 1909); Josiah Mainwaring-Sharp, *The Mares Record* (London: Galopin Press, 1929); Harry Keylock, *The Mating of Thoroughbred Horses: Some Conclusions and Deductions* (London: British Bloodstock Agency, 1942); Margaret Bayliss, *The Matriarchy of the American Turf, 1875–1930* (New York: R. L. Gerry, 1931); Geoffrey Sale and Michael Ross, *Meres de gagnants en France, 1941–55* (London: British Bloodstock Association, 1956), and Robert Denhardt, *Foundation Dams of the American Quarter Horse* (Norman: University of Oklahoma Press and American Quarter Horse Association, 1982).

Modern advocates of the greater influence of the mare over her offspring include Leon Rasmussen and Rommy Faversham, *Inbreeding to Superior Females: Using the Rasmussen Factor to Produce Better Racehorses* (Sydney: Australian Bloodhorse Review, 1999), and Richard Ulbrich, *Richard Ulbrich's Peerage of Racehorses* (Australia: Richard Ulbrich's Peerage of Racehorse Pty. Ltd., 1994). Ellen Parker's reine-de-course series first appeared in *Owner/Breeder Magazine* in 1991. The Parkers have issued a series called Pedlines and run a website, www.reines-de-course.com. The X-factor was proposed by Marianne Haun, in *Understanding the Power of the X-factor* (Neenah, Wis.: Russell Meerdink, 2002) and *The X-factor: What It Is and How to Find It* (Neena, Wis.: Russell Meerdink, 1997).

Tesio's breeding principles were deduced from his stud records by Harold Hampton, in *The First Scientific Principles of Thoroughbred Breeding* (Auckland: Scientific Breeding and Racing Publications, 1954). This work forms the basis of the popular online pedigree analysis tool Tesiopower (www.tesiopower.com).

CHAPTER 4. THE CENTERS OF THE WORLD

This chapter makes use of figures from the International Federation of Horseracing Authorities website, which can be accessed at www.horseracingintfed.com and from the North American Jockey Club Online Factbook at www.jockeyclub.com/factbook.asp.

George Lambton's *Men and Horses I Have Known* (London: J. A. Allen, 1924) is the best racing autobiography written, providing the most important historical portrait of Newmarket during one of its golden eras, which is also the subject of George Plumptre's *The Fast Set: The World of Edwardian Racing* (London: Andre Deutsch, 1985), notable for its fine photographs.

Despite its publication date, Roger Mortimer, *The Jockey Club* (1958; London: Cassell, 1968), remains the best source of information about the English Jockey Club, far superior to John Tyrell's joke-filled *Running Racing: The Jockey Club Years since 1750* (London: Quiller Press, 1997). Laura Thompson's *Newmarket: From James I to the Present Day* (London: Virgin, 2000) also contains important data on the Jockey Club but is limited by a lack of citations, which makes it impossible to verify.

An unpublished report by Forest Heath Council, *The Horse Racing Industry in Newmarket: Policy Statement* (June 1988), provides a useful statement of council priorities that are perpetually referred to and reproduced in later official documents and opinions.

Descriptions written by the pioneers of Kentucky can be found in Thomas Clark, *Agrarian Kentucky* (Lexington: University Press of Kentucky, 1977), Allen Share, *Cities in the Commonwealth: Two Centuries of Urban Life in Kentucky* (Lexington: University Press of Kentucky, 1982), and John Filson, *The Discovery, Settlement and Present State of Kentucke* (Wilmington: Printed by James Adams, 1784). John James Ingalls's peon to the Blue Grass, "In Praise of Blue Grass," first appeared in *Kansas Magazine* in 1872 and is reproduced in *A Collection of the Writings of John James Ingalls* (Kansas City, Mo.: Hudson-Kimberly, 1902).

Celebratory descriptions of the Thoroughbred in Kentucky can be found in James Gill, *Bloodstock: Breeding Winners in Europe and America* (London: Elm Tree Books, 1977), and Kent Hollingsworth, *The Kentucky Thoroughbred* (Lexington: University Press of Kentucky, 1976), in contrast to the enjoyable railings of one-time socialite photographer and self-confessed communist sympathizer Dan Bowmar in *Giants of the Turf: The Alexanders, the Belmonts, James R. Keene, the Whitneys* (Lexington, Ky.: The Blood-Horse, 1960).

Important information concerning Mare Reproductive Loss Syndrome (MRLS) can be found in *Proceedings of the First Workshop on MRLS*, ed. David Powell, Amy Troppman, and Thomas Tobin (Lexington: Kentucky Agricultural Experiment Station, 2003), and Richard Thalheimer and Robert Lawrence, *The Economic Loss to the Kentucky Equine Breeding Industry from MRLS of 2001*, prepared for the Office of the Governor, Commonwealth of Kentucky.

Stephen Aron's beautiful polemic *How the West Was Lost: The Transformation of Kentucky from Daniel Boone to Henry Clay* (Baltimore: Johns Hopkins University Press, 1996) is the source of the argument that the inner Blue Grass was settled and developed in a way that preserved inequalities, despite its frontier credentials. Karl Raitz and Dorn Van Dommelen, "Creating the Landscape Symbol Vocabulary for a Regional Image: The Case of the Kentucky Bluegrass," *Landscape Journal* 9, no. 2 (1990): 109–21, provides a clear academic perspective on the creation of the Blue Grass environment.

CHAPTER 5. STUD FARM

Fertility rates and other suggestive statistics can be calculated from the annual *Statistical Record: Return of Mares* (Northampton: Weatherbys, published annually). Other data relating to racehorse fertility can be found in the Jockey Club Online Factbook, as before.

CHAPTER 6. AUCTION

The most important source for chapter 6 are the catalogs produced by individual sales companies for each auction. I have catalogs from each of the sales I have attended which record the identities of the horses sold, so that I can monitor their performance and also the conditions of sale, which vary through time and space. Significant differences exist, for example, between conditions of sale listed in Tattersalls and Keeneland catalogs. The majority of the information that I have recorded by hand is now available on websites including www.tattersalls.com, www.keeneland.com, www.fasigtipton.com, and www.goffs.com.

The behavior I observed at auctions is sometimes discussed in the racing press or at racing forums. The English mainstream press occasionally "exposes" a case of improper conduct by agents. The case I refer to in the chapter is taken from *The Daily Telegraph*. Rachel Pagones writes courageously about Thoroughbred auctions. All her articles can be found in the cuttings library on the *Racing Post* website, www.racingpost.co.uk.

CHAPTER 7. TRAINING

The most important recent document concerning stable staff in Britain is the Donoughue Report, available at www.britishhorseracing.com/images/inside_horseracing/media/ss_Commission_report.pdf.

David Ashforth has been the most consistent and vociferous champion of pensions and associated improvements in working conditions for stable staff in the UK. Many of his articles can be accessed at the *Racing Post* cuttings library online at www.racingpost.co.uk. Howard Wright has stressed the importance of widening access to the two British racing schools to children of all backgrounds, from all of the various communities in Britain. Again, consult the cuttings library at www.racingpost.com for examples.

John Rosecrance has written about the backstretch and racetrack workers in "The Invisible Horsemen: The Social World of the Backstretch," in *Qualitative Sociology* 8, no. 3 (Fall 1985): 248–65. More recent is John Helmer's "The Horse in Backstretch Culture," *Qualitative Sociology* 14, no. 1 (1991): 175–95. These two articles serve as useful contrasts to descriptions such as Colin Cameron's *Dawn till Dusk: Nurturing Racing's Champions* (London: Highdown, 2005) or Laura Hillenbrand's *Seabiscuit* (London: Fourth Estate, 2001), which focus on successes that are enjoyed against the odds.

Some of the challenges overcome by racetrack workers are described in Curtiss Barrett and Don Clippinger, *Winners: The Story of Alcohol and Drug Abuse Programs in the Horse Racing Industry* (Hightstown, N.J.: Daily Racing Form Press, 1997). Information on charitable trusts providing training and education for backstretch workers and their children can be found on

the Internet. See, for example, the Groom Elite program: www.thehorsemeneliteprogram.com/home; the Edwin J. Gregson Foundation: www.gregsonfoundation.com/mission.htm.; and Racing for Education: www.racingscholarships.com.

A series of articles written by Janet Patton in the *Lexington Herald Leader* on 23 January 2005 ("A Painful Precedent," "At Their Own Risk," and, with Steve Lannen, "Making It Work") exposed conditions on the backstretches of Kentucky. Her descriptions are fully supported by my own experience. Her analysis is brief and focused on resolving the issue of workers compensation, but the articles are a useful starting point for a more in-depth understanding of the predicament faced by many racetrack workers.

CHAPTER 8. RACING TODAY

For statements on British racing by the Department of Culture, Media and Sport see their website: www.culture.gov.uk.

Tom LaMarra provides informed coverage of medication laws in Kentucky in the *Blood-Horse*. Many of his excellent articles can be accessed at www.bloodhorse.com.

Bill Heller's book *Run, Baby, Run: What Every Owner, Breeder, and Handicapper Should Know about Lasix in Racehorses* (Neenah, Wis.: Russell Meerdink, 2002), quantifies the use of legal medication in racehorses in the US.

Articles on EPO and its detection can be found in the *Blood-Horse* and the *Thoroughbred Times*. The performance-enhancing drugs and techniques used on racehorses are acquired from human sports, and it is likely that a new drug or drugs and new techniques will have usurped, for example, EPO and shock wave therapy by the time this book has been published.

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